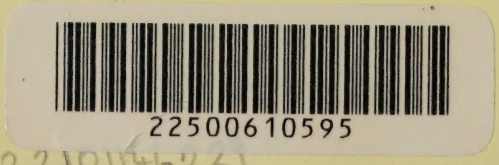
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OBSERVATIONS

ON THE

USE OF BELLADONNA EMPLOYED AS A DOUCHE,

IN

IRITIS AND SOME OTHER FORMS OF OPHTHALMIC DISEASE.

By F. A. Bulley, Esq.,

Surgeon to the Royal Berkshire Hospital, Reading.

Iritis and Inflammation of the Conjunctiva cured by the Injection of Belladonna.

Sally Allum, aged 20, an unhealthy looking country girl, was admitted into the hospital, June 22, on account of a severe inflammation of the conjunctiva and iris of both eyes. Her complaints had existed for about two months, and were not attributable to venereal infection; her face and eyelids were puffed and swelled, and the gums extremely sore from the effects of mercury, which she had been taking about six weeks with little or no relief to her symptoms. The following were the appearances observed on admission:—The conjunctival membrane of both eyes was greatly inflamed, and of a vivid bright red colour. There was some slight chemosis. The corneæ were of a dullish appearance, as if from the effusion of lymph into their texture, which had partially destroyed their natural transparency; seen through them, the irides appear inflamed with bright red patches of congested vessels in different parts of their structure, and some slight irregularity in their pupillary margins. The right eye was not altogether so much inflamed as the left, but she had very little vision with either; there was a constant discharge of pus from both. There was a large ulcer on the lower part of the left cornea, just below the pupil, the vessels leading to which were rather more congested than the rest. She has been suffering great pain in her head lately, especially towards the afternoon, when the pain in the eyes has become increased.

There is always excessive sensibility to light; the catamenia have not appeared for seven or eight months; there is considerable fever, generally increased in the evening; had never previously been subject to inflammation of the eyes. To be placed on middle diet and to have three ounces of port wine daily. She was ordered to have the following lotion warmed, injected rather forcibly into the eyes from a powerful syringe, frequently during the day, and totake a chalybeate mixture:—

Extract of belladonna, half a drachm;
Sulphate of copper, five grains. Dissolve in a pint of water.

Sulphate of iron, twenty-four grains;
Water, twelve ounces. To take two tablespoonfuls twice a-day in a glass of tepid water.

Carbonate of soda, twenty grains. To be taken with each dose of the mixture.

It would be tedious to trace the progress of this case through its different stages of improvement; it will be sufficient to say, that in a few days after the irrigation had been commenced, the inflammation of the conjunctiva began to subside, and the ulcer on the cornea assumed a more healthy appearance; the patient's general health improved in proportion. At the end of a month and four days the ulcer had completely healed; the irides had regained their natural healthy condition, and, with the exception of a slight leucomatous discolouration in the situation of the ulcer, the cornea had regained its transparency. She was, therefore, discharged from the hospital with very trifling remains of her complaint. She afterwards attended as an out-patient, and was ultimately discharged quite cured, and remained so for about a twelvemonth, when she had another attack of her complaint, but, as she did not come under my care, I had no opportunity of observing its progress.

The amendment under the use of the belladonna in this case was rather slower than in most of those which I have had an opportunity of observing. In the first part of the treatment, although the appearance of the irides became rapidly improved, and the signs of inflammation in them rapidly decreased, they seemed through the previous inflammation to have contracted adhesions to the parts behind, and thus their dilatation was prevented. By and by, however, it seemed as if the constant disposition to dilate, which the use of the belladonna produced, had caused the adhesions to give way; and thus, one morning, I found the pupils fully dilated and apparently quite free of the parts about; I then diminished the quantity of the belladonna, only using it now and then, and ultimately substituted warm water in its stead.

Chronic Inflammation and Suppuration of the Lachrymal Sac and Conjunctival Inflammation cured by Irrigation, or Warm Water Douche.

Amelia Exall, aged 17, admitted March 1. She states that her disease has existed more or less for about twelve months. There is a general œdematous condition of the lids of the left eye, with erysipelatous redness of the skin extending to some distance around it; the surface of the eye is constantly bathed in pus; there is a soft swelling over the situation of the lachrymal sac, caused by an accumulation of matter within it, which disappears on pressure, and pus exudes through the lower lachrymal duct, when the sac becomes empty and the swelling disappears; has had imperfect vision in both eyes for some time past; the cornea looks rather dull, but the iris is unaffected by the disease; there is considerable conjunctival inflammation of both eyes. As far as I could ascertain, she had been living very

scantily, and had paid no particular attention to her complaints.

To be placed on full diet.

Compound decoction of sarsaparilla. A wine glassful twice a day.

Tepid water to be forcibly injected from a powerful syringe into the eye several times a day.

March 4. The abscess over the lachymal sac burst last night, and discharged a considerable quantity of pus mixed with blood.

22. The opening which had been formed by the bursting of the sac has completely healed, and nothing but a slight cicatrix remains to show where it has been. On pressing the lower lachrymal duct, there is now no appearance of pus, and the tears seem to take their natural direction. The œdema of the lids has entirely subsided, and the eye, generally, has recovered its natural healthy appearance; the power of vision in both eyes being completely restored. She was discharged from the hospital.

As the inflammation in this case did not seem to extend beyond the superficial tunics of the eye, it was not deemed necessary to use the belladonna. I have generally in such cases found warm water alone sufficient; the beneficial results which I have observed to follow seeming rather to depend upon the direct action of the douche than upon any particular effect of the remedies I have occasionally used in solution in this manner; at least, this has appeared to me to be the case in almost all the instances of acute inflammation of the external tunics which I have treated in this way.

In some cases of atonic scrofulous inflammation, I have observed that where the use of the warm water douche does not speedily affect the disease, the addition of five grains of sulphate of copper to the pint of water has been followed by the most marked results.

Inflammation of the Conjunctiva with Vesication, cured by Irrigation or Syringing with the Belladonna Lotion.

Jane Hunt, aged 21, a tall and rather stout young woman, and of anæmic appearance, was admitted into the hospital, March 22, on account of an inflammation of the conjunctiva of both eyes, which had existed about a fortnight. She had shortly before been an inpatient with ulcers of the legs, which had been quite cured before she left the hospital. Her disease on readmission presents the following appearance:—There is a general turgescence of the conjunctival membrane covering the eyes, with great pain; some intolerance of light, and a sensation of grittiness upon the surface; the tarsal conjunctiva is but slightly affected; the corneæ have a dullish appearance, not apparently from any effusion of lymph into their texture, but from their having lost their natural glistening appearance, owing to the pus secreted from the other parts of the surface of the eye being diffused over them, and in some measure adherent to their external surface.

She had been suffering, and still suffered from considerable pain in the head, and had some fever, especially at night. The irides had begun to participate in the disease, being altered in appearance, with slight vascular patches in their texture.

On the right eye there are vesicles upon the conjunctiva, the meshes of vessels leading to which are of a brighter colour and more injected than the rest, like those usually observed running towards ulcers in the cornea. There are two such vesicles on the left eye, and one upon the right, situated just outside the margin of the cornea, and partly encroaching on its texture.

Compound decoction of sarsaparilla, four ounces. Twice a-day.

Extract of belladonna, one scruple;
Sulphate of copper, five grains;
Water, a pint. For a lotion. To be forcibly injected into the eyes with a syringe in the manner of a douche, three or four times a-day, the lotion being previously warmed.

To be placed on full diet.

24. Three days from her admission, a marked improvement has followed the assiduous use of the syringe. The conjunctiva has in a great measure recovered its natural healthy appearance, the congestive fulness of the vessels having subsided, excepting in those immediately leading to the vesicles. The corneæ are brighter from the cessation of purulent discharge, which does not now, as at first, interrupt her vision. The irides appear healthy underneath, the patches of lymph, and red vessels in their texture, having disappeared. The belladonna lotion has produced a dilatation of the pupils which, however, contract in a very strong light. She was therefore ordered to use it only once a-day, and the warm water douche at intervals.

30. She has been using the belladonna douche only once a-day since last report. She has been gradually improving, in fact I may almost say her disease has been removed.

There is now no appearance of the vesicles, the fluid of which has become absorbed, and the conjunctival membrane under which it had collected has sunk down to its natural level. Her general health has become so much improved, that I have noted her to be discharged from the hospital next week.

The foregoing case was probably one of acute inflammation of the conjunctiva, terminating in effusion underneath that membrane, which is found not unfrequently to end in ulceration. The good effects of the irrigating treatment were here very remarkable, and I have recorded it as most particularly instancing the beneficial results of this particular method of combatting this species of inflammation, of which this case was a singularly well-marked example.

REMARKS.

I have selected the foregoing cases from a great number of similar ones, because they appeared to me the best calculated to show the various lesions of the eye, which the method of treatment I have adopted was calculated to relieve.

It will be observed, that in the application of the douche, or irrigation to these cases, I used different ingredients in solution, according to the particular structures involved, or the peculiar form of disease which presented itself. In the case of incipient iritis and atonic opthalmia, I made use of a lotion containing belladonna, with a small quantity of sulphate of copper; but I used it a very short time, finding the

symptoms disappear under its employment, and warm water alone was afterwards sufficient for the cure. In the case of more confirmed iritis, I persisted in the belladonna douche during the whole period of the treatment, because it was necessary to do so from the intensity of the disease, and the adhesions which had apparently occurred. In the case of simple conjunctival inflammation, with lachrymal abscess, I used warm water alone, because the iris being unaffected, it was not necessary to employ the belladonna. I have used other remedies in solution, more particularly the wine of opium with sulphate of copper, which I have found especially useful in the scrofulous affections of the eyes in children where a slightly stimulating douche is required.

The manner in which I use the douche or irrigating method in this hospital, and in private practice, is as follows:—If the iris be the seat of the disease, and the conjunctiva likewise affected, I prescribe the following lotion:—

Extract of belladonna, twenty grains;
Sulphate of copper, five grains;
Water, a pint. For a lotion.

This is to be injected frequently during the day with a clean brass syringe, with an ivory pipe capable of holding from three to four ounces of the fluid; at first it is necessary to throw the stream upon the closed lids, at least for the few first times. By degrees, however, the patient becomes innured to the shock, and after a time is able to receive the continued stream upon the exposed surface of the eye without experiencing any disagreeable sensation. The most marked improvement will be found to follow the three or four first applications of the douche.

Besides the intrinsic value of the douche as a remedy in ophthalmic disease, it possesses, I think, advantages over the common method of applying lotions to the eye. It is impossible, or at least difficult, by any other means, to remove entirely from the surface of the eye the pus which is secreted from the inflamed membranes, especially as some slight force is sometimes necessary to detatch it, and I have often found that the simple contact of fluid in an eye-glass, which is the most common method, will not produce its removal. The other means which are commonly employed to convey lotions to the eye, not unfrequently increase the irritation of the surface, and very often aggravate the disease.

With regard to its application generally in diseases of the eye, I was led to adopt it from witnessing the excellent effects of the warm douche bath when used in diseased states of the fibrous tissue of the joints, and I thought that, as the structures were somewhat analagous, something like the same results might be produced. In this I have not been disappointed, and, as I have found the value of the remedy myself I am anxions that it should have a fair trial, not wishing to take any credit for my suggestion until its merits have been more fully ascertained, and I shall feel obliged to any one who will give it a fair and impartial trial.

Its good results, in most of the cases which I have seen, seem to be due to the gently stimulating effects which warm and medicated water, applied in this way, have upon the minute vessels of the tissues of the eye, reducing inflammation by increasing the circulation through them where the external tunics only are concerned; but where the iris is either primarily or secondarily implicated, of course much must be referred to the specific effect of the belladonna in allaying the increased nervous irritability of its tissue, upon which the inflammation may often be said to depend.

There is a particular form of ulceration of the cornea in which I have found this plan of treatment particularly useful.

In ill fed and anæmic persons, ulcers will frequently appear on the cornea, without any obvious sign of inflammation in the surrounding vessels; they seem to arise, in fact, from a deficient nutrition of its texture. It has been proved by microscopic experiments, and is now generally supposed, that the cornea is not vascular, but that it derives its nourishment through absorption or imbibition from the surrounding vessels, and as these vessels participate in the general anæmic condition and powerless state of the circulation, of course the cornea, which is dependent on these for its supply, in some measure loses its vitality, and destruction of its texture ensues. In these cases I have found the irrigating treatment of the utmost possible service.*

P.S. I wish to correct an error which crept into my report of a case of purpura in the last week's Journal. I was misinformed respecting the existence of hæmorrage from the mucous membranes, which I stated as not having occurred. I have since, however, been told that epistaxis, and some degree of hæmoptysis, and some slight signs of the hæmorragic tendency in other parts of the system, had taken place during the latter part of the patient's illness.

* For a more particular description of this condition—vide Dr. Williams's clinical remarks.—"Medical Gazette."

A CASE
OF
MUSCULAR AMAUROSIS,
CURED BY THE
DIVISION OF FOUR RECTI MUSCLES.

TO THE EDITORS OF THE PROVINCIAL JOURNAL.

GENTLEMEN,—The accompanying case of Henry Skinner is one which I published, amongst others, in a letter addressed to Dr. Farre, for the purpose of illustrating the symptoms of impaired vision, depending on morbid muscular contraction, and of which my reviewer, in the "British and Foreign Medical Review" for October, 1841, says, "There is not a shadow of evidence that the symptoms depend on the alleged cause"—namely, that of muscular contraction. I, therefore, in the present report of the case, have given a repetition of what I then published concerning it, with its subsequent history and treatment, from which I think it will be evident that the opinion of the said reviewer was, to say the least of it, wanting in judgment.

I remain, Gentlemen,
Your obliged servant,
JAMES J. ADAMS.

27, New Broad-street, City.

Henry Skinner, aged 22, cabinet-maker; of healthy appearance, but of delicate complexion, fair hair, and grey irides. The positions of both eyes are perfectly natural, but small. If an object be held at the distance of four inches from the eyes, both will equally and fully converge; but, if the object be approached close to the root of the nose, the equal convergence will become destroyed, by the left eye turning towards its natural central position, while the right eye more completely enters its inner canthus.

The appearance and action of the irides are natural sight, with both eyelids open, very defective after moderate exertion; when he first attempts to view a small object, or to read, the object or print is perfectly distinct for about four or five minutes, when a dimness of the sight, attended by some confusion of the objects looked at, prevents his continuing to use his eyes till they have been rested for about one minute, after which rest he is again able to pursue his employment with all the advantages of distinct vision, till the approach of the next attack of dimness, which will commence at a period somewhat less than five minutes, and last during nearly double the time of the first. If he be anxious to pursue his occupation, he can only do so by the means of repeated rests, of a gradually increasing length, and at shorter and shorter intervals, till two or three hours have expired; he will then be compelled to rest his eyes during many succeeding hours, otherwise the dimness or mist, of which he complains, would become so complete as to leave him in perfect darkness for a time. A few days since he endeavoured to write a short letter, which, after much difficulty, he accomplished in the space of two hours. He says that, had his eyes been well, he could have performed it easily in twenty minutes.

If the eyes be examined separately, their degrees of impaired vision will be found to be nearly alike; perhaps the sight of the right may be rather more imperfect than that of the left, but in both eyes it is most imperfect towards the nose. The sight is generally worse in the first part of the morning, and after dinner. In the morning, during the first half hour after he has left his bed, the sight remains very good; it then commences to become dim, even if he looks at large objects, and this state of the sight will continue for about three hours; it then becomes much less so, and even sufficiently good to allow him to follow his business. After dinner the same kind of attack commences, but generally does not last longer than one or two hours.

H. S. states that he suffers much pain in the brows, forehead, and temples, which is always increased when the dimness of sight is most troublesome, and is readily excited by the light and heat of the sun, or by extra bodily exertion. The history of the case is simply this: that about twelve months since he first came to London from the country, and that his sight soon began gradually to fail him while at work; also, that its defect has steadily increased, in spite of continued treatment by alteratives, purgatives, and counter-rritants.

Such is the history of the case when published in May, 1841. The following is its continuation from September 28, 1841:—The general appearances of the patient are much altered since May last; he is thin, and exceedingly out of health, and his countenance is expressive of much anxiety; the position of his eyes is natural, their power of convergence full and equal, and the repulsion of the right eye just perceptible; the power of inversion of each cornea is more than complete, by one quarter of its surface; that of eversion is equally complete in either eye.

His sight is exceedingly defective, and worse than he has ever known it to be; a gaze at any object, but for a few seconds, is followed by a dimness of the sight, and an involuntary closure of the eyelids; he cannot see to read, to write, or to follow his occupation for longer than five minutes at a time, without being compelled to rest his eyes; and he says that, if he endeavours to work at his trade from seven o'clock in the morning till seven at night, he cannot accomplish more than about two hours of work, the rests of his eyes requiring to be frequent, and of long duration; sight in both eyes equally affected. A convex lens, No. 2, improves the sight.

He suffers from severe pains in the back part of the head, and in the eyes, also from giddiness, and that to such an extent as to cause him to be in fear of falling, all of which symptoms are much increased in their severity if he exerts his eyes or his body, or if he be surrounded by much noise, and they are worse when the dimness of his sight is greatest; he likewise complains of feeling very drowsy.

His history from May, 1841, the date of the preceding report of this case, is, that he has continued unremittingly to attend to the directions of an ophthalmic surgeon at an eye hospital, under whom his general treatment has been, at one time, mercurial, even to salivation, at another, tonic; and his local treatment, counter-irritation, to which may be added a perfect rest of the eyes during nearly three months. From May till now the sight has been gradually becoming worse, though not without a few temporary improvements.

Oct. 4. I divided the left internal rectus muscle, which was observed to be remarkably thick and powerful; the result of the operation on the position of the eye was, its divergence when the right was central.

5. Position as immediately after operation. He thinks that the sight of the left eye is slightly improved, but of this he cannot speak positively, so much pain and smarting of the eye resulting from the least attempt to use it. The pains about his head and eyes are less severe than previously to operation, though after it their severity, during several hours, was much increased.

9. Position unaltered; inversion of the left eye very imperfect; sight in the left eye decidedly improved; it can be used for a longer time than before operation, without mistiness or pain being excited; he suffers severely from giddiness, which is instantly relieved by pressing the right eye firmly and backwards; mere closure of the lids will not remove the giddiness.

16. General appearance improved; less anxiety of countenance; and he says that his appetite and spirits are better; position and association of both eyes natural; convergence slight, and equal at three inches; repulsion very slight in the left, and not central; inversion just complete in the left; eversion slightly more complete in the left than in the right; sight, with both eyes open, very good if he looks

directly forwards, or to the left side, but more defective than usual if he looks to his right, every object appearing as if in a dense fog. If either eye be closed, objects are instantly seen as distinctly to the right as in any other direction, but not quite so distinctly as when both are open; the sight of the left eye is better than that of the right. He says that his eyes feel stronger, and that his sight is clearer; the pains of the eyes and head are less constant in the attendance. The treatment has consisted in the close bandaging of the right eye. He states that, three days since, he wrote a long letter without being compelled to rest his eyes; it was accomplished in half an hour, and, according to his belief, he could not, previously to operation, have written it in a less time than that of two hours.

23. Objective symptoms as on the 16th; sight much improved; he can see to read the smallest print with perfect distinctness; he read yesterday for two hours at a time, without observing any dimness of sight or mixing of the letters, an aching of the eye-balls being the only cause which compelled him to desist; objects are still seen indistinctly when situated to his right side; sight equally perfect in either eye, and equal to that experienced when both eyes are open.

25. *Second Operation.* Divided the left external rectus; did not remove a portion; the central position of the eye was not disturbed by the operation.

30. Left eye slightly converged; right central; association unnatural; the closure of either eyelid causes a divergence of the open eye, and a corresponding convergence of the one covered; eversion of the right cornea not beyond two lines of its natural central position; sight nearly as before the last operation, and is equally well in all directions; he still suffers severely from attacks of pain, which occur suddenly, and mostly after food, and he says that they are generally accompanied by a flow of tears; he has not bandaged either eye.

Nov. 6. Position of both eyes nearly natural, the left being but very slightly inverted. Eversion not complete in the left eye, by one and a half lines. Sight not quite so clear as it has been of late, though "pearl" can be read at the distance of twenty inches, and gazing on it, during several minutes, will not produce dimness. The sight of either eye is clearer than that experienced when both eyes are open. Objects are now seen less distinctly on the left side, and the closure of either eye, instantly, renders their appearance clearer—a condition exactly the reverse of that which succeeded the first operation. His painful sensations are lessened, though readily excited by exertion of the body, or eyes.

27. Position and association of the eyes perfectly natural, they having been, for the space of a few days, equally and slightly converged. Prominence slightly more in the left eye than in the right, than which it is the more natural and handsome looking. Sight, free from dimness, if exertion of the eyes be not continued beyond two or three hours; and he can see most clearly if only one eye be used at a time. He is still very subject to pain across the forehead, in the brows, temples, and eyeballs; the pains, which used to be felt at the back of the head, have nearly ceased. The pains are more severely felt on the right side than the left; if he wakes in the night he feels a smarting and aching pain in the left eyeball.

Dec. 4. Objective symptoms as already reported, with the exception of the eversion of the left eye, which is all but half a line of being complete. Sight not so perfect nor strong as of late; any exertion of the eye, beyond two hours, produces dimness. His painful symptoms continue to be severe; he says that pain is always felt before the dimness of sight is observed, and, on resting his eyes, that the sight is first relieved, then the pains. He attributes the present defect of sight to an extra exertion of his eyes five days ago, which consisted in his reading, by candle-light, for the space of three and a half hours.

6. *Third Operation.* Divided the right external rectus, did not remove a portion; the immediate effects of the operation were, a convergence of both eyes, and a lessening of the power of eversion in the right eye by two and a half lines.

9. Both eyes converged, the left more than the right; sight very confused, not double, and, if either eye be used separately, the vision is clear and strong; his pains are lessened, though they were aggravated on the day of operation; the left eye has been closely bandaged since the day of operation; the right is now ordered to be closed, instead of the left, for about two days.

20. Position, both eyes slightly and equally converged; association nearly natural, the closed eye remaining inverted, the open one becoming central; convergence extreme and equal; repulsion, none; eversion not complete in the left by half a line, and in the right by one and a half lines; sight still very confused, but not double; the more distant the object, the more confused, and objects appear to be diminished in size, also to be displaced; those situated to the right appear to be at a point more to the left than they really are; for instance, two plates, with a fork between them, being placed directly before him, the right hand plate appeared to be shifted close to the right side of the left hand plate, and the fork seemed to occupy the centre of the right hand plate; dimness does not increase according to the degree of exertion of the eyes; at times objects are seen, with both eyes open, perfectly distinct for a few seconds; if either eye be used by itself, the sight is at all times clear; the pains in the head are less frequent and less severe; the aching of his eyeballs has entirely subsided.

27. Position and association of both eyes perfectly natural; convergence extreme and equal; no repulsion; inversion complete in the left, and more than complete in the right by one quarter of its corneal surface; eversion not complete by half a line in the left, and by one line in the right; sight improved; he can see to read very finely engraved letters, but continued exertion of the eyes renders the appearance of the letters dim and mixed; sight in the left eye very slightly more perfect than that of the right; pain is still felt in the front part of the head, but on some days he is perfectly free from pain; continued exertion of the eyes, beyond three or four hours, is followed by pain across the forehead; if either eye be used separately, pain is more quickly produced by the use of the right eye than by that of the left.

Fourth Operation. Divided the right internal rectus; it was remarkable for its size; the immediate effect

was a divergence of both eyes, but of the right more than of the left; treatment, to closely bandage the right eye.

Jan. 8, 1842. Position of both eyes very central; association not quite natural, the covered cornea being slightly diverged; convergence full at one inch; repulsion alternate, slight, and unsteady, and in the left more frequent and full; inversion complete and equal; sight, with both eyes open, more perfect than it has been at any time since he first applied to me; distant objects are remarkably distinct, but very near objects are not quite so; the sight of each eye is equally perfect, and if one eye be used at a time, both near and distant objects are seen with natural clearness; closure of the left eyelid is attended by pain over the right eye, which subsides on the left being reopened.

22. Position and association natural; convergence full; repulsion slight, alternate, and unsteady; sight improved; near objects are seen more clearly; no pain in the head or eyes after exertion, and the pains of late have not been felt in the early part of the morning.

29. Sight still improved in its clearness and brightness; he can see to read during as many hours as he pleases without dimness of vision or pain being produced; he only would feel drowsy; the sight in each eye is now equal to that of both eyes; a few wandering pains through the head are occasionally felt, but their degree is so slight as not to cause him any uneasiness, or interruption to his occupation.

REMARKS.

If the facts of the above described case be briefly stated, it will appear that a healthy young man, of about twenty-one years of age, by trade a cabinet-maker, came from the country to London for employment, his sight being at that time perfectly well, and that he did not work long at his business in his new situation, which was in London, before he felt that his sight was not capable of so much exertion as formerly. The sight from that time gradually became more and more defective, with respect to its clearness, during exertion of the eyes, and, at about the expiration of one twelvemonth, its defect was such that he applied for its relief to a surgeon of an eye hospital, which application was made in the spring of 1841. He remained under the treatment of that surgeon till September of the same year, and, in the interval, paid the utmost attention to his eyes, by attending the surgeon regularly, following his directions strictly, and by most carefully resting his eyes during three months of the time. The treatment consisted of the usual remedies which are tried for the cure of his complaint —namely, a course of mercury, and one of tonics, accompanied by severe counter-irritation. The results of his more than six months' treatment was a very considerable increase of impairment of health, sight, and pain; and when he applied to me in September, 1841, a gaze of a few minutes at any object caused his sight to become dim, and his head and eyes extremely painful, and an attempt to work at his trade, from seven o'clock in the morning till seven at night, would only allow him to execute about two hours of work; his frequent rests of his eyes, to relieve their sight and pain, required so much time.

On October the 4th I divided the left internal rectus muscle; on the 25th of the same month, the left external rectus; on the 6th of December, the right external rectus, and, on the 27th of the same month, the right internal rectus. Previously to the first operation, the usual position of the eyes was central and natural; after the first operation the left eye diverged, and after the second converged; after the third both eyes converged, and after the fourth both diverged; and before each operation, and in a few days after the last, the positions of the eyes were central and natural, and their motions perfect to a natural extent. By the first operation the sight of both eyes was much improved as to clearness and power of continued exertion; small print could be read during two hours at a time, and the pains were lessened. By the second the sight of each eye was used separately, and was improved, but not quite so perfect as it had been if both eyes were open, and his pains lessened. By the third the sight, with both eyes open, was improved, that of the left made more perfect than that of the right, and his pains greatly lessened. By the fourth and last operation, his sight was made as perfect as he has ever known it to be, equal in strength in each eye, and capable of enduring the longest exertions without dimness being produced; also, his pains were so far removed that they were but very occasionally felt, and then in a degree so slight as not to cause him uneasiness, or any interruption to his occupation. So that instead of losing his sight after a short gaze at an object, and being capable of only executing two hours of work at his trade in the space of twelve hours, he can now view, for a natural time, the finely engraved letters of the Lord's Prayer, as engraved in a circle of less size than a fourpenny piece, with distinctness and comfort, and he can see to do as long a day's work at his business as he ever could.

CASE

OF

TUMOUR DEVELOPED IN THE MIDST OF THE CAUDA EQUINA.

By W. W. Fisher, M.D.,

Downing Professor of Physic, Cambridge.

The case I am about to communicate came under my observation in January, 1840. The name of the individual affected was Taylor; he was thirty-eight years of age, was a tailor by trade, and had been intemperate in his habits for some time previous to the commencement of his illness. He had about three years before (i.e. in 1837), injured, whilst riding, the lower part of the loins by the back part of the saddle, and from that period he began to suffer from pain in the lumbar and sacral regions, which was attributed to rheumatism; the pain gradually became more violent, and extended down the legs, which began to swell. He was obliged to give up work in June, 1839, and became bed-ridden in the September of the same year; he could not, however, lie down, but rested on

his hands and knees, in which position I found him when I first saw him. He was then unable to move either his loins or lower extremities; but he had the free use of neck, shoulders, and arms. The pain, which had formerly been chiefly confined to the region of the sacrum, was now more particularly felt across the seat, extending from one ischium to the other. There was great numbness throughout the lower extremities; and although no sensation was in the left leg or toes by touch, nevertheless he complained strongly of a feeling of heat in the parts. There was some degree of feeling, on touch, left in the right leg. The legs were very œdematous; there were large ulcerations on those parts of the knees on which he rested, yet he did not experience pain from them. He was generally sleepless, but did not suffer from headache; his breathing was easy, his pulse undisturbed, and his appetite good. He had difficulty in making water; and his bowels were generally confined, and at times so obstinately constipated as to resist the action of cathartics and purgative injections. An issue had been placed on the region of the sacrum, the discharge from which was thin; this was rendered of a more purulent character by the use of iron, from which he seemed to derive more benefit than from any other medicament, especially as regarded the making of water.

His death took place in May last. He had been able, about a fortnight before it occurred, to place himself on his back, after which the œdema of the legs subsided; there was, however, incontinence of the urine, which was at times mixed with blood. He slept better, and was even able to assist in making a waistcoat about a week before he died.

Post-mortem.—Owing to peculiar circumstances, I was only able to examine the back; imperfect, however, as the investigation was, it furnished me with a morbid product sufficient to account for the peculiarity of the symptoms, and the situation and structure of which must be a matter of interest in pathology. The sacrum seemed more protuberant than usual; this appearance, however, arose from the loins being more depressed. The arches of the dorsal and lumbar vertebræ and the posterior wall of the sacrum were removed; the laminæ of the lumbar vertebræ, as well as their bodies, were partially affected with caries.

Viewed posteriorly, the dura mater appeared to be in its natural state until it reached the extremity of the spinal cord; but from that point to the end of the sacrum it was wanting, so that the mass of tumours, was exposed to view. The growth extended more towards the left than the right side of that portion of the spinal canal in which it was situated. The spinal cord was cut across, about the middle of the back, and inferior portion of it was removed; nearly the whole of the diseased mass came along with it. The dura mater was laid open posteriorly The cord appeared to be quite sound throughout. The diseased mass had a lobulated form, and was involved in the cauda equina; and although it was traversed by a few of the nerves, nevertheless the greater portion of the latter could be detached from it.

It was difficult to determine the seat of the tumour when examined posteriorly; but anteriorly the dura mater was sound throughout; and the arachnoid membrane, especially at the upper portion of the tumour, could be traced intact between the latter and the dura mater. Here and there processes were observed to pass from the arachnoid to the diseased structure, but they were similar to those met with between the archnoid and the pia mater in their natural state. The tumour, or rather mass of tumours, on which a great number of vessels were spread, was, as I observed before, surrounded on all sides by the roots of the nerves forming the cauda equina. The lower portion of this morbid growth had the form of a tubercle. It presented several traces of vascularity in the centre, and had a scirrhous appearance; I could not however make anything out satisfactory with regard to its minute structure. The upper portions of the tumour were softer, and were involved in a fine glistening covering; sections of several portions of them showed them to be composed of a grey, semi-transparent, jelly-like substance, infiltrated amidst reticulated tissue, and marked with sanguineous striæ, several of which appeared like true vessels.

I had not an opportunity of having any part of this morbid growth analysed. I plunged a portion of it in pure alcohol, and as it retained its semi-transparency, I concluded it was not albuminous.

Notwithstanding the researches I have made, I have not yet been able to meet with any case on record similar to the one just described. Amongst the many points of interest which the tumours offer—as, for instance, the region they occupy, the peculiarity of their structure, the symptoms they gave rise to—I shall on the present occasion allude more particularly to one, that is to say, the tissue in which they were developed. There can be little doubt that the disease was seated in the pia mater, a vascular web in which morbid products are more frequently formed than in either of the other membranes of the brain. I have observed in a diseased state of the pyloric extremity of the stomach, the walls of which were greatly thickened, a morbid product, which was seated between the serous and muscular layers, and of which the minute structure was similar to that of the section of the tumour in question.

There exists a great analogy between the pia mater of the brain and spinal cord and the subserous tissue of other organs; and, indeed, where the former is united with the arachnoid, the analogy becomes complete. Observation has led me to consider the subserous cellular tissue as being more frequently than any other tissue of the human frame the seat of morbid products. I shall not however enter at length into this subject on the present occasion, but shall defer till another the statement of the facts on which this opinion is grounded.—*Transact. of Prov. Association*, Vol. X.

CASE
OF
LUMBAR ARTIFICIAL ANUS
TERMINATING SUCCESSFULLY.

By M. Amussat.

In a recent number of the "Provincial Journal" we published a highly interesting case of lumbar artificial anus, performed at Leeds, by Mr. Teale. The operation was not successful, probably because it had been delayed too long. Since then M. Amussat has published the following successful case, which makes the sixth performed by him. We insert it, slightly abridged, as we are desirous of directing the attention of English surgeons to an operation which has not, we fear, received from them the degree of attention that it merits.

M. C——, tailor, 57 years of age, was attacked by pleurisy at the age of 17; since then he has been subject to cough and frequent spitting of blood, which always made him dread consumption, but no sign of this disease has appeared. For a length of time, whenever fatigued, he felt a dull, deep pain near the spleen, which compelled him to suspend his work. About nine months ago the patient first perceived a difficulty in passing his stools, which were small in quantity, of a greenish tint, and often tinged with blood; afterwards he passed nearly a glassful of pure blood by the anus. These symptoms were relieved by appropriate treatment, but soon afterwards they returned, and the patient perceived a tumour in the left iliac fossa; this was the seat of considerable lancinating pain, and all the symptoms were aggravated from this time. The patient now came to Paris for advice. On examination a tumour was distinctly felt in the left iliac fossa, appearing to rest on and following the course of the sigmoid flexure of the colon; it was from two and a half to three inches in length, by one thick, and it was impossible to say whether or not it was formed by the intestine. Various purgative remedies were now administered, but without effect; and the abdomen became tympanitic and painful. M. Rostan, who was consulted, diagnosticated a cancerous tumour of the intestine, and thought that the patient's death was not far distant. On the following day, November 20, 1841, M. Amussat was consulted; the abdomen was now greatly distended with gaz, and there was frequent inclination to vomit, with some hiccup; the patient passed a good deal of air from the mouth, but none *per anum*. M. Amussat agreed in opinion with M. Rostan, but was desirous of having further advice; in the mean time purgatives were given, and forced enemata were thrown up without effect.

21. The patient passed a very bad night; the tympanitis continued to extend; towards morning he vomited some mucus mixed with blood. Four forced enemata were carefully thrown up, and probably passed beyond the obstruction in the intestine, for they did not return; from this period all the symptoms were decidedly aggravated; the patient felt as if he were suffocating, and loudly demanded the operation as a means of relief. In consultation with MM. Rostan and Breschet the operation was decided upon, but during the night the patient vomited a large quantity of mucous fluid mixed with blood. This led to some discussion between the medical men on the following day. It was thought that the blood vomited might be simply an exhalation from the mucous membrane of the stomach or bowels; but on the other hand that it might indicate a cancerous disease of the pylorus, and hence that an operation was contraindicated.

During the 22nd the patient felt better; he was less oppressed, and seemed relieved by the vomiting; in the evening a few small enemata had been thrown up, and brought away a small quantity of fœcal matter.

On the 23rd, M. Magendie joined the other medical men in consultation; he thought that, as the patient's condition was somewhat improved, and the obstruction of the bowels not complete, it would be better to defer the operation; he recommended a continuation of the means already employed, and that an œsophagus tube should be passed up as far as the obstruction, with the hope of overcoming it; in one case which had occurred in his wards at the Hotel-Dieu, and where a cancer of the sigmoid flexure of the colon had been diagnosticated, the tube had succeeded in removing the obstruction. M. Breschet also thought that the operation should be deferred.

M. Rostan said that, as he believed there was a cancerous disease of the colon, he did not think there was another one in the stomach; in the numerous autopsies that he had made, he never found cancerous deposit in the stomach and intestine at the same time. He considered the blood vomited to have been a mere exhalation, and did not think that the operation was contraindicated by this circumstance.

As opinions were thus divided, it was determined to delay the operation. In the evening, M. Amussat passed up an œsophagus bougie, at the extremity of which was a small wax bougie, but he was unable to pass the obstruction; on withdrawing it, the patient felt an inclination to go to stool, and passed about a spoonful of fœcal matter; for the last twenty days he never passed any thing without the aid of enemata.

24. The patient again passed some fœces with the assistance of a lavement; the abdomen is softer, and there is no sense of suffocation as before. During the next three days things remained in the same state.

28. The patient slept a little during the night, but he is depressed in spirits; the abdomen is greatly distended with gaz; and for the last thirty-six hours he has not passed any wind or fœcal matter through the anus. An œsophagus bougie was now passed up to a distance of eleven inches; on withdrawing it, the end was seen to be strongly bent on itself and tinged with bloody mucus; some gaz came away without any relief.

29. The tube was again introduced, and seemed to have passed the obstruction, for it entered to a depth of thirteen inches; a clyster was immediately thrown up without effect. Two forced enemata were now thrown up, and immediately passed with a considerable quantity of fœcal matter.

On the 2nd of December the tube was passed up to a depth of sixteen inches, and a lavement injected, but hardly a trace of fæces came away; from this time the evacuations were completely suppressed,

and the patient insisted on having the operation performed on the 8th of December, 1841.

It was decided that the opening should be made in the right lumbar region, on account of the presumed disease at the left side. M. Amussat made a transverse incision midway between the crista ilii and the last rib, and then divided the subjacent tissues, until a fold of intestine was seen; this was enveloped in fatty tissue, and an artery ran close upon it; the vessel, which had been accidentally divided, was twisted. Here, however, a great difficulty presented itself—Was the intestine, seen at the bottom of the wound, a portion of the colon or of the small intestines? In this uncertainty nothing remained but to expose the muscular coat of the gut, and trust to chance; a needle armed with a ligature was passed through the intestine, and immediately some gaz, having a fœcal odour, escaped. A tenaculum was now fixed close to the point where the ligature had been applied, and the intestine being steadied by these means, a small incision was made with the scissors; this was enlarged with a probe-pointed bistoury, and the finger then introduced into the gut; on withdrawing the finger, a considerable quantity of gaz and fœcal matter escaped. Three enemata were now injected into the artificial opening and came away, bringing with them three washhand basinsful of fæces, containing the seeds of grapes and pears, which the patient had eaten about two months previously.

The intestine was fixed to the anterior angle of the wound by four points of suture; the patient felt immediate relief from the operation; the size of the abdomen was considerably reduced, and the breathing was much freer.

It is unnecessary to transcribe the daily reports of the case; on the the 14th (7th day), M. Amussat divided the sutures by which the intestine was fixed to the wound; the patient was allowed to have a little broth.

On the 10th day he passed a very copious stool, hard and cylindrical, through the anus, a circumstance which showed that the intestinal obstruction was not complete; on the 13th day the patient was able to come down stairs from the sixth story of the house in which he lodged. From this period to the 50th day after the operation the patient continued to pass his evacuations through the artificial opening; but a quantity of muco-purulent matter was daily discharged through the anus.

On the 50th day the patient returned to his family in the country, having made a journey of thirty-nine leagues without any inconvenience.

On the 22nd of February, 1842, M. Amussat heard from his medical attendant that he continued in an excellent state, but that occasionally fetid purulent matter was dischaged through the anus.

The object, then, of the operation in this case, was fully attained. During forty days the obstacle to the evacuation of the fæces was so great that the patient was reduced to imminent danger, and would, in all probability, have speedily perished; he has now a chance of living for a considerable time.

Since the operation just described, M. Amussat performed a sixth of the same kind on an infant affected with congenital imperforation of the rectum. M. Amussat had tried to open the rectum through the anus, but was unable to find the gut; he then made an artificial opening in the left lumbar region and the infant, now two months old, is well. This is the sixth successful case which has occurred in the practice of M. Amussat.—*Gaz des Hop.*, No. 37.

ON THE

OPERATION OF TRACHEOTOMY IN CROUP,

PERFORMED AT

THE CHILDREN'S HOSPITAL,

AND ON ITS RESULTS.

By A. Becquerel, M.D.

During the year 1841, twenty cases of true croup were admitted into the Children's Hospital, Paris. The whole of these patients died; nineteen perished shortly after the attack, and one who had recovered from the croup died in two months afterwards of pulmonary tubercles. Of the twenty cases, thirteen were boys and seven girls; the ages of the patients varied from two to fourteen years.

The operation of tracheotomy was performed in nine cases, eight times by the hospital internes, and once by M. Guersant, jun. In the following remarks I shall endeavour to describe, first, the circumstances under which the operation was performed; second, its immediate results; and third, its remote consequences.

1. *Circumstances under which the Operation was Performed.*

In all the nine cases the children were in the most dangerous state, and no other hope of safety remained; in one, indeed, the operation was performed at the instant the little patient expired, and with the faint hope of restoring it to life. The subject of another case was a child four years of age, who had been ill three days; the cough and voice were extinct; and asphyxia was imminent; there were several traces of false membranes on the amygdalæ and pharynx. The child was carried to the hospital, and operated on without delay. The symptoms of asphyxia, however, were much aggravated during her removal, and the patient expired immediately after the operation. On examination a cylinder of false membrane was found adhering to the larynx and two upper thirds of the trachea. Had the operation been performed half an hour earlier, and the false membrane been expelled, it is clear that the operation might have been successful. In a third case, M. Guersant, jun., operated on a child affected with stridulous laryngitis which bore a perfect resemblance to true croup; but no trace of false membrane escaped from the opening or was found after death. The periods at which tracheotomy was performed in the nine cases were as follows:—1 on the second day; 3 on the third; 3 on the fourth; 1 on the fifth; and 1 on the sixth day.

2. *Immediate Results of the Operation.*

In none of the cases did any blood penetrate into the trachea, in sufficient quantity to give rise to or increase the asphyxia. The operation was easy of execution and quickly performed.

In four cases the operation was followed by syncope; this generally lasted a short time, but in one case it was so prolonged that we were about to abandon the child as dead; one of the assistants, however, kept up artificial respiration for ten minutes, and the child was restored from apparent death.

One of the first effects of the operation was invariably a remarkable improvement in the patients' condition; the children appeared as if they were restored to life; the respiration became slower and more free; and the purple hue of the face disappeared. Occasionally, however, there were fits of coughing at this period, either coming on spontaneously or excited by the canula, and a quantity of false membrane or mucus was ejected. In several cases the whole of the false membranes was removed after the operation; they did not form again, or in very small quantities, yet, whenever the wound was closed, suffocation became imminent.

3. *Remote Results of the Operation.*

These may depend on the single or combined influence of three causes—viz., the child's sojourn in an hospital, the persistence of the disease, or the operation itself.

In the seven cases now analysed (two are omitted because they proved instantaneously fatal), the interval between the operation and the death of the patient was, in one case, 7 hours; in one, 10 hours; in one, 29 hours; in one, 30 hours; in one, 42 hours; in one, 7 days; and in one, 10 days.

The following are the unfavourable symptoms noticed after the operation:—

1. Persistence of the dyspnœa; this generally occurred in accesses, and was accompanied by fits of low, stifled cough; it was alleviated by the expulsion of mucus.

2. Secretion of a great quantity of mucus or mucopurulent matter.

In three cases I was struck by the enormous quantity of mucus secreted by the bronchi, infinitely greater than what occurs in any form of bronchitis amongst children; in two cases no trace of lesion of the bronchial mucous membrane could be discovered. The existence of this excessive secretion was indicated by a mucous râle all over the chest. It evidently depended on the unusual stimulus of cold air passing in through the trachea. As the little patients began to sink they were often unable to expel this mucus; and by drying in the canula it gave rise to accesses of suffocation. Great care must be taken to keep the instrument clear, or change it often; or to excite coughing by instilling a few drops of water through the canula.

3. Inflammation of the lining membrane of the air passages and pneumonia are, also, complications which occur both after the operation and in cases where it has not been performed.

4. In almost every case the operation was followed by intense general fever; and in two cases the febrile symptoms ran so high (although no inflammation of the lungs could be discovered) that it was necessary to take blood from the arm.

5. Convulsions came on in two cases; in one they appeared two days before death, and in the other were instantly fatal.

6. In one case, where the child survived to the tenth day, the edges of the wound became gangrenous; but this occurred under an epidemic influence, and without it the little patient would have probably recovered. In another case there was emphysema of the neck.

7. *Post-mortem Appearances.* — In the child on whom M. Guersant operated, nothing was found after death, except a small quantity of mucus in the larynx and trachea, with lobular pneumonia in the right side of the chest. It is difficult to say whether the case was one of stridulous laryngitis, or merely a nervous affection; or whether the false membranes were expelled without being noticed. The child died nineteen hours after the operation. In three of the six remaining cases there were false membranes in the pharynx; in one, no trace of false membrane was found after death, but they had been removed after the operation and expelled by coughing. In one case no lesion whatever was found; a great quantity of mucus had been ejected during life, but there was no inflammation of the lungs or bronchi. In three of the six cases, false membranes were discovered in the bronchi, but no trace of pus. In the child who died on the second day there was intense inflammation of the trachea and bronchi. Inflammation of the tissue of the lungs existed in four cases.

8. *Causes of Death.*—We are now prepared to determine the causes of death after tracheotomy in croup.

These are, first, bronchitis or an excessive secretion of mucus in the bronchi; second, pneumonia; third, the persistence of the original disease, and especially the presence of false membranes in the bronchial tubes; fourth, convulsions; fifth, finally in some cases death occurs without our being able to detect any local disease, and it seems to result from the general condition of the patient. This latter mode of termination should not be lost sight of when we are called upon to weigh the chances of success or failure of tracheotomy.—*Bul. de Therap. Jan.* 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, APRIL 9, 1842.

The poor-law commissioners have at length been compelled to eat their own words. After having, for the last six or eight years, treated the representations of the medical profession with disregard and contempt, they now suddenly discover that these representations were reasonable, and that, in point of economy, nothing is gained by degrading a liberal profession, or poisoning the poor man under the pretext of physicking him cheaply.

In the last two numbers of the "Provincial Journal" we published the "medical order of the poor-law commissioners," and "the letter explanatory of that order." From these documents, it appears that cer-

tain concessions have been wrung from the triumvirate at Somerset-house. With the benevolent President of the College of Surgeons we would fain believe the present improvements to have emanated from the good feelings of the commissioners—if we could; but it is impossible for us to forget what has taken place during the last four years, or to believe that anything save excessive pressure from without can have changed the views, temper, and conduct of the poor-law commissioners. This may be an uncharitable opinion; we fear it is a just one. The commissioners may claim for themselves the credit of this long-delayed measure of justice; but those who have watched the progress of events connected with this question will be inclined to attribute any beneficial changes that have been made to the zealous efforts of the Provincial and other associations, and the powerful co-operation of the public press.

The main features which characterise the recent order of the commissioners are—the abolition of the odious tender system—the fixing a maximum of area and population for districts—the extra remuneration for operations and midwifery—and the institution of a permanent pauper list. In addition to these, the medical officers are to hold office permanently, instead of annually, and a double qualification—in medicine and surgery—is substituted for the ancient *regime* under which her Majesty's destitute subjects might have been, and were, entrusted to the care of cow-doctors and quacks.

The poor-law commissioners, then, have at length decided on carrying into execution the amendments which they acknowledged to be necessary in their report of December 31, 1839. Two years were allowed to pass away without any attempt to redress the grievances of the medical profession. We suppose that we must content ourselves with the reflection "better late than never;" but the concessions which have been thus tardily made are of a very meagre description. Let us cast a rapid glance at them.

The tender system, it is said, is abolished. The commissioners may, perhaps, have intended to do away with tenders for medical officers, but the terms of their regulation leave a wide field for abuse. The medical practitioners of a district are no longer to be called upon to send in tenders for the district; but the boards of guardians may fix on any sum they please (provided such sum be approved of by the commissioners), and then advertise for persons willing to undertake the duties of parochial medical officer at the sum specified. This is evidently a tender under another form. Under the old plan, the medical candidates tendered; here the tender comes from the guardians. If the latter have the power of fixing on an inadequate sum for medical attendance, and then inviting the practitioners of a district to compete for such inadequate remuneration, we fear either that the evils of the old tender system will remain in full force, or that the medical practitioners will be compelled to combine together, and force the guardians to raise the amount of salary to a proper standard.

With regard to the size of districts, the commissioners content themselves with ordaining that no district (entrusted to *one* medical officer) shall exceed 15,000 acres or contain a population of more than 15,000 persons. It is obvious that the mere diminution of the size of districts, irrespective of the distance and requirements of each parish, is a very insufficient arrangement; besides, the average population, under the old system, was only 5,000 for each medical district.

The extra remuneration for certain surgical operations and for midwifery appears to be calculated with some liberality; the medical officers of workhouses, however, are not to receive any payment for operations performed within the precincts of the house; this, we are told, is to encourage the removal of patients suffering from accidents, &c., to infirmaries and hospitals, in order "that they may enjoy the practised skill and combined judgment of the medical men usually connected with such establishments." How considerate the commissioners become when they see a prospect of having their paupers' limbs amputated for nothing!

The institution of a permanent pauper list is one from which the poor will derive considerable advantage. The necessity of some such provision for the immediate relief of aged and infirm persons was approved of by the parliamentary committee of 1838, and by the poor-law committee of the Provincial Association; but it was never contemplated, we believe, that the exhibition of "the permanent pauper ticket" should entitle the holder to unlimited attendance on the part of the medical officer, without any provision being made for the adequate remuneration of the latter.

The creation of a permanent pauper list, as contemplated by the commissioners, will evidently require an additional expenditure of time and labour on the part of the medical attendant. Were an equitable sum per case fixed, the interests of the medical officer would be protected; without such an arrangement, he must continue, as heretofore, to sacrifice himself for the cause of humanity—and the benefit of rate-payers.

The last point connected with this subject, which we shall now notice, is the qualification of the medical officers of unions. The poor-law committee of the Provincial Association have always insisted on the necessity of demanding, from the candidate for office under the poor-law, the double qualification in medicine or surgery. This principle has been adopted by the commissioners, and we shall no longer have to witness the disgraceful scenes exhibited under the old

system, when the lives of thousands of the suffering poor were entrusted to unprincipled and most ignorant adventurers. The commissioners, however, in defining the medical qualification, have passed from an excess of negligence to a principle of exclusiveness, that cannot fail to act injuriously on the interests of the profession at large. The qualifications for officers attached to English unions are to be exclusively English; the medical qualification must have been attained from some English university or college, or from Apothecaries' Hall; the surgical qualification from the College of Surgeons in London. Irish and Scotch graduates are thus virtually excluded; for although the commissioners, in their "explanatory letter," profess to regard a Scotch or Irish surgical qualification as equivalent to an English one, the boards of guardians are to employ the less favoured individuals in cases of necessity only. Such a restriction is almost tantamount to a virtual exclusion. Formerly the commissioners were so careless on the point of qualification as to employ 228 persons, out of 1830, who had never undergone any medical examination whatever. Now they undertake, with a stroke of the pen, to disqualify the members of the Irish and Scottish universities and colleges. It remains to be seen how far this unjust and absurd act will be tolerated by the authorities in Ireland and Scotland.

One of the chief points which attracted the attention of the parliamentary committee, and in which the interests of the medical profession are chiefly concerned, was the mode of fixing some uniform principle for assuring to the poor-law medical officer an adequate remuneration for his services. The commissioners have not thought proper to touch on this important point. We must, therefore, look to a higher quarter for relief. But this is a question which we must examine apart.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

March 22, 1842.

The PRESIDENT in the Chair.

Cases of Perforation of the Stomach, of the Duodenum, and of the Bronchial Tube. By WILLIAM BAINBRIDGE, Esq., Upper Tooting.

The author observes that, as these cases are inevitably fatal, they present no feature of practical interest beyond the mere necessity of being acquainted with the circumstance of their occasional occurrence, so as to be able to distinguish the event, and give a correct prognosis.

Two cases are related of perforation of the stomach; the first occurred in a woman, aged 60, of spare habits and sallow complexion, who, with the exception of vague symptoms of dyspepsia, felt pretty well until the evening of Sept. 26, when, after having taken supper, she was seized with pain at the pit of the stomach, with fulness and oppression. These symptoms rapidly increased, attended with great anxiety and enormous distention of the belly. Active purgatives by the mouth, and turpentine clysters, were administered; the tube of the stomach-pump was also introduced to favour the escape of pus, but she sank on the 29th, apparently exhausted by a violent diarrhœa.

On examination after death, the whole of the peritoneum was found entirely red, with deposits of lymph and pus glueing together the intestines. The left lobe of the liver adhered to the anterior wall of the stomach: on separating this, there appeared a small circular orifice in the centre of the stomach, through which oozed its contents. In the anterior of the organ, corresponding to this opening, was a circular ulcer, with raised and indurated edges, surrounded with redness, but no softening of the membrane.

The second case was that of a healthy-looking girl, aged 18, who was seized with a sense of sickness shortly after eating a hearty breakfast. Decided symptoms of peritoneal inflammation shortly supervened, such as vomiting, hiccup, tension, tenderness, and swelling of the abdomen; quick and thrilling pulse; cold and clammy perspiration; the vomiting continued incessant until her death, which took place in twenty-four hours. It is stated, that for two or three weeks previous to this attack, she felt well, with the exception of a little pain at her epigastrium and between the shoulders.

Examination after Death.—Effusion of serum into the peritoneal cavity; the intestines glued together by lymph and pus; a perforation, the size of a pea, in the anterior wall of the stomach; interiorly, corresponding to this, a round ulcer, with hardened and elevated edges.

In the two cases of perforation of the duodenum, the symptoms came on almost immediately after having taken a hearty meal; they were those of acute peritonitis.

On examination after death, besides effusion of serum into the peritoneal cavity, and deposits of lymph and pus, there was a rupture of the posterior part of the duodenum; in one instance to the extent of two, and in the other of three inches: the mucous membrane of this intestine was very soft, in one case a mere pulp.

One of these patients had previously suffered only from vague symptoms of dyspepsia, and the other was in perfect health up to the period of the attack.

The author observes that there must be a singular proneness in the upper part of the anterior wall of the stomach to this kind of ulceration, for in these two cases, and others which he has read, as well as in six specimens examined at Guy's Hospital, the ulcer was situated in very nearly the same spot.

With respect to the rupture of the duodenum, he refers to the work of Dr. Hodgkin on the Mucous Membranes, who states that the portion of the duodenum called the "pyloric valvulæ," is peculiarly prone to disease, and often very lacerable. In six cases of malignant scarlet fever which the author examined last year, he found this portion of the intestine intensely red, the remainder of the intestinal canal being healthy.

The symptoms after perforation the author states to be a severe pain at the epigastrium, or right hypochondrium, succeeded by the general symptoms of

peritonitis. He, however, considers the extreme anxiety and distress of the patient's countenance as more pathognomonic of the occurrence than the vomiting or state of the pulse.

LONDON MEDICAL SOCIETY.

SPONTANEOUS PERFORATION OF THE STOMACH.

Dr. CLUTTERBUCK communicated the following case from Dr. J. B. Thompson :—

Maria Martin, aged 26, unmarried, of nervous temperament, previously enjoying good health, and of very active habits, had never complained of any gastric derangement. When in the act of putting on her stays, she was suddenly seized with an acute pain in the region of the epigastrium, at eight o'clock in the morning, and the pain continued to increase hourly. Dr. Thompson visited her at twelve o'clock at noon, and found her then labouring under the most intense and seemingly excruciating pain, which she, from her own description, said was confined to a particular part of the stomach, about an inch and a half to the left of the xyphoid cartilage. Leeches were at once applied to this part, and cupping glasses afterwards, and the bleeding was encouraged by stupes and poultices ; she was then ordered into a hip bath, and allowed to remain in it for twenty minutes, when she was removed to bed and got an active aperient draught. These remedies apparently afforded some very considerable relief, and the draught had operated twice during the day. She had some undisturbed sleep; but the pain again returned at eleven o'clock at night, and seemed to be considerably aggravated, and to occupy the greater part of the abdomen. She was again visited at two o'clock, a.m., next morning, when she was found evidently rapidly sinking, and in a semi-comatose state. Dr. Thompson was then only for the first time satisfied that the patient's case was one of spontaneous rupture of the stomach, and that the diffuse peritoneal inflammation then present was owing to the extravasation of the fluid contents of the organ into the peritoneal sac. She gradually got worse, and died in about thirty-five hours from the commencement of her attack.

There was some difficulty in procuring a post-mortem examination. However, the friends were prevailed upon, and she was examined twenty-two hours after death. In the outward appearance of the stomach there was nothing to attract notice, but on opening it there was general inflammation of the surface, and on closely examining its parietes, there was found in the lesser curvature an oval opening in the mucous membrane ; the submucous coat was also similarly perforated, but the opening in the serous coat was not observable at first sight. It was only to be noticed (unless very minutely examined) by passing a probe from the opening in the mucous coat.

It was an oblique slit, not exactly corresponding to the opening in the inner coats ; there was nearly a pint of fluid contents of the stomach in the abdominal cavity, and the peritoneum presented appearances of general inflammation. A further examination was not permitted ; but the patient seemed in every other respect to have been in good general health.

OBSERVATIONS.

The foregoing is an instance of a very peculiar form of disease which seems to be confined to a point, and terminates in ulceration. The duration of the disease varies from eight to twelve or thirty-six hours ; we seldom have an opportunity of seeing the stomach in the early stage of this affection ; some are of opinion that it does not prove fatal during the early or inflammatory stage, as would appear to have been the case in the foregoing instance ; the ulcer itself does not often destroy life, but it permits the fluid contents of the stomach to pass into the peritoneum, and the resulting peritonitis proves fatal.

The ulcers in these cases are generally of various sizes, from that of a sixpence, as was the case in this instance, to that of a half-a-crown piece. In the more chronic cases, the ulcers are likely to be larger and better defined about the margins. They invariably are oval-shaped or somewhat rounded, particularly in the mucous coat, and in recent cases seem as if they were punched out. The ulceration is mostly noticed in or about the lesser curvature of the stomach, on its posterior inferior surface. There is no reason to believe that the disease is of a cancerous nature. The appearance of the ulcer and its general history ought, in the opinion of the author, to be a sufficient proof that it has its origin in the mucous coat of the stomach, and not, as is invariably the case, in scirrhous affections in the submucous tissue. Besides, we have more of the mucous coat destroyed in these cases than of any other membrane or tissue.

The symptoms of the disease are at first rather obscure. In many cases the general health appears good, and often no complaint is made till some short time before death, when a most painful and violent train of symptoms present themselves. It would also appear that the nervous and muscular coats are engaged at the same time with the mucous coat, and that it is only when the serous coat becomes engaged that those acute symptoms generally exhibit themselves. Then, either the peritoneal coat gives way, the contents of the stomach are extravasated, and fatal peritonitis ensues, or a degree of partial inflammation may be produced in a small portion of the peritoneum, extended to, but not yet finally destroyed ; lymph is thrown out, adhesion takes place between that particular part and some adjoining viscus, and in this manner life may be preserved for the time. Beclard's case was a remarkable instance of this nature ; he died of disease of the brain, and a cicatrix was discovered near the lesser curvature of the stomach, half an inch from the cardiac orifice ; it was about the size of a shilling ; the surface was depressed and traversed by bands, *one* of which passed across the centre and divided it into *two* lacunæ, the base of which rested on the peritoneal coat. Recamier mentions a case in which the pancreas formed the base of a cicatrised ulcer of the stomach ; the patient had died of another complaint. Cruveilhier and others do not think such cicatrices are of very rare occurrence.

Usually, however, the ulcer in these cases, destroys life, and in one of three ways :—First, by gradually exhausting the patient's strength, by pain, vomiting, &c., frequently aided by disease of the intestines, liver, spleen, or pancreas, with perhaps occasional

dropsy; secondly, by hæmorrhage, which is either the result of slow and often repeated oozings of blood from the ulcer, or sudden, from a large vessel which the ulcer eventually opens; thirdly, by the more quick and violent effects which follow perforation of the stomach, and the consequent extravasation of its contents into the peritoneum. In these suddenly fatal cases, the patients may be taken off in from six or twelve hours before peritoneal inflammation has fully set in, and simply from the shock which the nervous system has sustained, and from which it cannot afterwards rally. We see this occurring daily in cases of severe or extensive scalds or burns, and other serious lesions or injuries; or a violent peritonitis sets in, and destroys the patient in from twenty-four to thirty-six hours.

The diagnosis of ulceration is most difficult; indeed, the author is not aware that we as yet possess any pathognomonic symptom whereby we may with certainty distinguish this disease from other affections—such as gastrodynia, scirrhus, functional dyspepsia, chronic ulceration, or chronic inflammation. There is mostly vomiting and irritability of the stomach; but it has been seen without these. There is often pyrosis, which also is often absent. In some cases there is a wasting of the flesh, but in others the *embon point* is retained. It would appear that persons may remain in apparently perfect health up to the moment at which the ulcer gives way. Dr. Abercrombie gives a case of this kind; and another case is recorded, in one of the Dublin journals, of a young lady who went to church in excellent health, had never complained of any gastric disturbance, but was suddenly, while in church, seized with the symptoms of effusion into the peritoneal sac, and expired in thirty-six hours. The post-mortem examination in this case showed a perforating ulcer with effusion and peritonitis.

A circumscribed inflammation, which is, perhaps, more dangerous than a diffused one, because more likely to be followed by ulceration, may only be attended by slight dyspeptic symptoms, or may even escape notice altogether, until the ulcer has perforated the stomach, and fatal peritonitis ensues. In the more chronic forms of these affections, the mucous membrane seems thickened; its papillæ are very considerably developed; the degree of redness varies from a dusky brown to a somewhat livid or leaden hue; the latter is often seen on detached patches, where it would appear that ulceration would at some future period take place. It is worthy of notice, also, that these cases are more frequently met with in the female than in the male, generally between the ages of eighteen and thirty years, and mostly in unmarried women who were not apparently labouring under any organic or functional derangement. It would be interesting to enquire whether the gastric juice possesses any more active chemical properties at this period, and in this class, than at any other time, or under different circumstances. It is also very remarkable, that all these ruptures or perforations are to be found in or about the lesser curvature. In the few cases which have come under the notice of the author, he has never been able to perceive the thickened and elevated edges that some gentlemen speak of; he presumes these must be very chronic cases, and not at all such as those here alluded to. In all chronic cases of this description there is generally a long and tedious illness, accompanied by all the varied and anomolous distressing symptoms of indigestion, constipation, and considerable hepatic derangement.

An interesting discussion followed the reading of this paper, after which the society adjourned.

MEDICAL SOCIETY OF PARIS.

SOLUTION OF URINARY CALCULI.

At a recent meeting of this society M. Petit related the following interesting case, illustrative of the action of Vichy water on urinary calculi.

The patient, a man named Jacob, had been treated during the season of 1839, by a course of Vichy waters, but had not received much benefit from them, having neglected to follow the directions given to him. On the 10th of June, 1840, he was examined by MM. Civiale, Blandin, and Berard, who frequently seized the stone between the branches of the instrument, and discovered its diameters to be thirteen, fourteen, and fifteen lines.

The man arrived at Vichy on the 21st June, and commenced his treatment on the 23rd; this time he followed punctually every direction. The waters and baths were administered in the usual manner, and, in addition, the mineral waters were injected into his bladder, by means of a double syringe, two or three times a day. The dose of the waters taken by the mouth was from twelve to fifteen and often twenty-glasses daily.

This treatment was borne without any inconvenience, and the other attendants at the spa took care that it was not interrupted for a single day. Towards the commencement of August the patient began to pass some fragments of calculi; several of these were lost, because he was often compelled to make water when away from home. About the 10th of September the discharge of calculous fragments ceased; the patient was now free from pain and the sensation of a foreign body, and made water freely. On the 18th he left Vichy, and on the 28th November he was examined by MM. Civiale, Blandin, and Berard, who decided that the bladder was free from stone. The patient now enjoys perfect health, and is completely free from all symptoms of catarrh of the bladder.

This is the only case in which the complete removal of the urinary calculus by the Vichy waters has been clearly demonstrated. M. Petit thinks that the calculus was destroyed rather by disintegration of its particles than by solution; he also remarks that even this case, striking as it may appear to be, leaves some doubt upon his mind, because the patient had undergone a lithotriptic sitting at the hospital Beaujon before he commenced the use of the Vichy waters. Finally M. Petit concludes that the waters of Vichy chiefly act on the mucus which unites the particles of calculi together, and in this he coincides with the opinion of M. Pelouse, which we published in our last number.

CHILDREN'S HOSPITAL, PARIS.

CASE OF ACUTE RHEUMATISM—PERICARDITIS—SUDDEN DEATH.

By P. Hennis Green, M.B.

Alfred Begot, a boy, 14 years of age, was admitted into hospital October 11. For some time past the child had complained of wandering pains in the limbs, but not sufficiently severe to prevent him from working at his trade. On the 8th and 9th he experienced a general sense of fatigue, with headache, pain in the muscles of the neck, and uneasiness during the act of swallowing; in the night of the 9th the ancle-joints became red, swollen, and excessively painful; general febrile symptoms set in; and in the morning the elbow-joints were attacked in a similar manner.

Oct. 12. The child complains of headache; the face is red, and expressive of pain; the least movement makes him cry out; the knee-joints and the left ancle are red, swollen, and painful; there is pain, without swelling or redness, in the hip-joints, and in the right shoulder-joint; he also complains of severe pain in the muscles of the neck, and is unable to move his head; skin hot, but moist; pulse 112; bowels confined; no vomiting.

He was ordered to have poultices to the joints and frictions with an anodyne liniment along the thighs.

13. Passed a restless night; the knee and ancle-joints are less swollen; the wrist-joints are now attacked, and likewise the left elbow-joint; the abdominal muscles are excessively tense and painful; the testicles firmly drawn up; pulse 112, hard.

Ipecacuanha, fifteen grains;
Tartar emetic, one grain.

To be taken in two doses, one a half hour after the other.

14. The child says he felt somewhat relieved after the vomiting, but the symptoms are now the same as yesterday. Bowels still confined.

Tartar emetic, four grains, in a six ounce mixture.

To take a teaspoonful every second hour.

15. The child has taken the whole of the mixture without any effect on the stomach or bowels; there is no improvement in the child's state; all the joints of the hand are now swollen and painful, and also that of the great toe; the pain in the abdominal muscles continues.

To have six grains of tartar emetic as before.

16. Same general state; no stool yet.

Tartar emetic, eight grains.

17. The emetic is still completely tolerated; the pulse has fallen to 100; pain less severe.

Tartar emetic, ten grains.

18. The last dose of emetic produced vomiting; all the symptoms are alleviated; the ancle-joints are free from pain and swelling, but the rheumatic inflammation still exists in the right knee and hip-joint; pulse 96.

To continue the mixture.

19. The child vomited five times during the day, but passed no stool; he now feels constantly sick at the stomach; tongue moist and clean; no pain is now experienced, except in the abdominal muscles; the countenance, however, is expressive of deep suffering and anxiety.

To discontinue the mixture, and take a purgative enema.

20. The enema produced one evacuation; joints all free from pain, but the child's countenance is much changed for the worse; he complains of severe pain in the epigastric region, and in the left side of the chest, low down; each inspiration aggravates the pain; pulse 102; respiration 36. The patient continued in this state without any remarkable change, and died suddenly in the evening.

Examination Thirteen Hours after Death.

Head.—The membrane of the brain were moderately injected, and the cerebral substance healthy throughout.

Chest.—The pericardium contained about two spoonfuls of sero-purulent matter; the anterior surface of the heart, for about the extent of a square inch, was covered with false membrane of recent formation; over the rest of the organ there were numerous granules of a pale yellow colour; the serous lining of the pericardium was also covered with false membrane here and there. The cavities of the heart contained a good deal of dark blood. The pleura and substance of the lungs were healthy.

Abdomen.—The mucous membrane of the stomach presented a pretty deep injection and was softened in several points; the mucous lining of the small intestines was also much injected; there were a few ounces of serum in the cavity of the abdomen; the other viscera were healthy.

REMARKS.

In his late work on rheumatism, Dr. Macleod observes that the proportion of cases of rheumatic pericarditis is considerably greater in young subjects than in those more advanced in years. Of 226 persons labouring under acute rheumatism, and examined by Dr. Macleod, 8 were under fifteen years of age, and of these, four, or one half, had pericarditis.

That children, as well as adults, are frequently subject to rheumatic inflammation of the heart is perfectly true, but I do not think that the proportion is nearly so great as that indicated by Dr. Macleod; I have seen a much greater number of cases, and would not estimate it at more than one fourth.

The disease, however, may frequently be overlooked in children, because its symptoms are often very obscure, and seldom so well marked as they are in adults. Of this, we have an example in the case just related. The existence of rheumatic pericarditis was not suspected during life. On the day which preceded his death, the child was to all appearance considerably improved; the febrile symptoms had nearly disappeared, and the only unfavourable sign was a peculiar anxious and depressed expression of the countenance; on the day of his death, the expression of the countenance was of the same character, and there was some pain over the edges of the ribs at the left side; but this was attributed to irritation of the stomach caused by the tartar emetic; the pulse and respiration were not much accelerated, nor were the general symptoms of such a nature as to attract particular attention; yet the child dies suddenly in the evening without a struggle. To what are we to attribute this sudden and unexpected termination of the

disease? Probably to syncope. The softened and injected state of the mucous lining of the stomach and intestines is a point worthy of attention; I have more than once observed this condition in children who were rapidly cut off by some disease, while taking tartar emetic in high doses. It is not easy to say how far the remedy may have contributed to bring on this state of the mucous membrane, but the coincidence has been so frequent, that I should be unwilling to employ the Italian method in children, without the greatest reserve and caution.

FURTHER OBSERVATIONS ON THE VARIOLÆ VACCINÆ.

By Robert Ceely, Esq.

In the last volume of the "Transactions of the Provincial Association," Mr. Ceely has published some additional remarks on the variolæ vaccinæ. The object of Mr. Ceely, in this communication, is to furnish some data for the natural history of the disease, to collect information relative to the phenomena of the casual vaccine, and accumulate facts illustrative of the pathology and ætiology of the disease in its primary form. In the first part of his paper, Mr. Ceely relates several interesting cases of variolæ vaccinæ occurring in cows and milkers.

As to the cause of the development of the disease in the cows, Mr. Ceely gives several reasons which show the possibility of its having been transmitted from a close in which variolous effluvia was known to exist; but he does not affirm that such was the cause. The various appearances of the disease in its different stages are pointed out, as being points of much importance towards obtaining a correct knowledge of the vaccine disease in the cow.

In the *early* stage five of the milch cows appeared to have heat and and tenderness of the teats, upon which, emdedded in the skin, were distinctly felt small hard pimples, which daily increased in magnitude and tenderness, and in a week or ten days rose into *blisters*, and quickly ran into brown and blackish scabs. At this period, when the teats were thus *blistered* and swollen and very tender, the constitutional symptoms were first observed—viz, sudden "sinking," or loss of milk, drivelling of saliva from the mouth, and frequent inflation and retraction of the cheeks, staring of the coat, "tucking up of the limbs," and "sticking up" of the back, and rapid loss of flesh.

In the *ulcerative* stage Mr. Ceely directs attention to the following circumstances, which must form the basis of our diagnosis:—

Vaccine ulcers are generally distinguishable by a rounded elevation, more or lest manifest, of their outer margins, and a circumscribed induration of greater or less extent, of their base, with a proportionate depression in their centres of deeper ulceration, sometimes caused by a slough. But these characters are obviously influenced by several circumstances which must be taken into account when attempting our diagnosis; the principle are—stage of the decease, texture of the tissues, site of the ulcers. It is necessary to know that in the early ulcerative stage of the severer forms of some other vesicles nearly as much induration, &c., is occasionally found, especially if the texture of the tissues is lax, and much mechanical irritation has been inflicted. If we can be positively assured that the above-mentioned diagnostic conditions have existed in any given ulcer for three or four weeks, or even longer, especially if it be removed from *severe* casualties, we may fairly presume that it is vaccine; and this presumption will be strengthened, if, under the circumstances, the ulcer be small, for such sized and circumstanced ulcers of most other vesicles, being for the most part superficial and subedemic, speedily heal. But as the texture of the parts in which vaccine vesicles appear varies so much, and as their seat is not uniform in depth, and as elevation of the margin and induration of the base and depression of the centres of the consecutive ulcers are sometimes merely questions of degree (since time or stage is not always determinable), it is clear that uncertainty in judging of an individual ulcer must now and then happen. Out of this difficulty we often escape by finding a group of characteristic ulcers on the same animal, or a series of animals, clearly infected one from another. And when we have an opportunity of inspecting ten or twelve, to say nothing of thirty or forty subjects, we seldom fail to detect on some of them the elements of a safe and correct diagnosis, as late as the fifth or sixth week. Such condition of parts very rarely occurs in connection with ulcers resulting from other contagious vesicles, except on peculiar subjects, where the subcutaneous cellular tissue has suppurated and sloughed, and the cicatrising ulcer has a puckered surface and indurated margin. Most commonly this result is confined to the first subject attacked, which continues also to furnish a succession of milder vesicles for four or five weeks. It must be borne in mind, however, that the vaccine ulcer also is found coexistent with small superficial vesicles or bullæ, both on the teats and the upper, back, and hairy parts of the udder, of the same nature and possessed of the same harmless contents as the vesicles and bullæ which appear (at the acme, or on and after the decline of the vaccine), on the face, trunk, and limbs of children in high health, and in a few adults with irritable skins.

Several of the milkers were affected with casual vaccine, and from the matter thus furnished different individuals were vaccinated. The results are thus described by Mr. Ceely:—

The lymph taken from one of those affected (Joseph Brooks) was directly transferred to three of his younger brothers, a lad older than himself, and two infants. The primary symptoms in his brothers and the young man, aged 19, were manifest on the seventh day, but were mild. After the appearance of the areolæ, the secondary symptoms were promptly excited, and gradually increased till their decline. There was nothing remarkable in the character of the vesicles till the full development of the areolæ, when they became remarkably broad and flat, spreading outwards, turgid with lymph, bursting their walls, and, like those from which they were derived, followed by sloughs

adults, where the skin was thin, vascular, or irritable, upon the full expansion of the areolæ, the vesicles spread out broad and flat, and, yielding to the distending influence of their *diluted* contents, burst and terminated in sloughs, more or less deep, followed by a corresponding extent of ulceration; but where the skin was pale and thick, and especially if the patients were also pale and dark in complexion—conditions in every respect most suitable for the use of *new* lymph—then the vesicles were more compact, restricted, bold, and better defined, with proportionately less areola, and often not distinguishable at any period of and deep slowly healing ulcerations. In the infants, fine and healthy, with thick compact skins, the usual fretfulness and feverishness appeared on the evening of the sixth or seventh day, remitting in the morning and increasing in the evening, in proportion as the areolæ advanced, and declining with them. As usual, nothing remarkable before the eighth day in the appearance of the vesicles: in one of the vesicles burst and sloughed; in the other they remained entire, were fine and satisfactory, leaving characteristic crusts, and moderately deep finely reticulated cicatrices.

In the subsequent transfers of the lymph the effects varied according to circumstances. In infants, with tense thick skins, the vesicles, though active, were perfectly from inconvenience, yielding fine "tamarind stone" crust and regular scars. On children and their course from those induced by ordinary lymph. Here the crusts were of the ordinary size and form, and the cicatrices of the common depth and extent.

The constitutional symptoms varied not less. In many *infants* the *primary* were scarcely noticed; the *secondary*, proportioned to the texture and vascularity of the parts, the local inflammation, and the temperament of the individual. In *children*, as usual, both were more frequently and more early noticed: the *primary*, on the sixth or seventh day; the *secondary*, at an early period, were marked with vomiting, diarrhœa, much fever, and occasional delirium. In *adults* the same early indications of constitutional symptoms, though not always, were often evinced; and during the *secondary*, as usual, much general complaint was made, some few keeping their beds a day or two. But the primary and secondary constitutional symptoms were comparatively mild in many individuals of the three classes above mentioned.

At the expiration of three months several patients were tested with variola, by inoculation, with no other than a trifling fugitive inflammation at the point of insertion, or a small vesicle resembling the modified vaccine in form, size, and course, containing a *limpid adhesive* lymph, raised on an indurated base, and terminating on the eighth or ninth day in a small, hard, blackish brown crust, and unattended throughout its course with any constitutional symptoms.

STATISTICS OF RHEUMATISM.

By Roderick Macleod, M.D.

I have thought that it might not be without interest to illustrate the relative frequency and duration of the various kinds of rheumatism by tabular views and numerical statements, deduced from the cases I had treated in St. George's Hospital. These I now present to the reader, who will probably attach more importance to them when I inform him that the journals whence they are taken were not kept by me, but by clinical clerks, who had no particular views or objects to support, and who, therefore, merely recorded what was passing before them: besides which the number of gentlemen successively employed (exceeding thirty) would effectually prevent risk of any bias from undue uniformity of opinion.

Another circumstance connected with these tables which it may be proper to state is, that I published a set containing analogous calculations some years ago, and that on referring to the paper in question I find all the relative proportions between the various classes of cases, and all the general inferences to be deduced from them, so entirely alike as require little more than transcription.

AGE AND SEX.

Ages.	Males.	Females.	Total.
10 to 15	4	4	8
15 — 20	23	25	48
20 — 25	29	17	46
25 — 30	25	17	42
30 — 35	18	9	27
35 — 40	9	8	27
45 — 50	3	0	3
50 — 55	3	4	7
55 — 60	1	0	1
	137	89	226

From the preceding table it would appear that in both sexes from 15 to 30 is the period of life most obnoxious to rheumatic fever; 136 out of 226 cases having occured within the period specified. The tendency to the disease is much diminished after 40, and after 50 it is comparatively rare.

PERIODS OF TREATMENT.

Discharged cured.	Relieved	Dead, of Rheumatic Pericarditis in its acute form.
In 1 week . . 15		3
10 days, 8		
12 — 9		
14 — 28		
In 2 weeks . . 45		
— 3 — . . 50	4	
— 4 — . . 38	5	
— 5 — . . 18	0	
— 6 — . . 24	5	
— 7 — . . 4	2	
— 8 — . . 6	1	
— 10 — . . 2	0	
— 12 — . . 2	0	
— 16 — . . 2	0	
206	17	3

It thus appears that, of the 206 cases of rheumatic fever, 148 were discharged cured within a month:

and when it is borne in mind that it was a rule rigidly enforced not to send out patients who have had acute rheumatism as soon as they cease to complain of pain, we may safely assert that the number above specified was cured within three weeks—110 within a fortnight and 60 within eight days. In a small number, perhaps one-eighth of the whole, the disease was absolutely cut short at once within two, three, or four days, and in five or six cases it was (even though accompanied by much swelling and redness of one or more joints) completely arrested within twenty-four hours. To effect this, however, various concurrent circumstances were required, the chief of which were, a young subject, a constitution previously healthy, and a very recent attack.

Of the 226 cases of acute rheu matism above alluded to, the heart was affected in 52, or rather more than one-fifth; but taking the whole number of cases of rheumatism, including every form, the proportion of such complication I believe to be little more than half the above.

Of the total number of patients labouring under acute rheumatism, 137 were males and 89 females; of the former 28, and of the latter 24, had symptoms of pericarditis; or, of the men, rather less than one in five, and of the women rather more than one in four.

Of the 52 cases in which the heart was implicated, I find it recorded of only one that the pain in the limbs was simultaneously so alleviated as to give the least colouring to the idea of metastasis.

In 48 of the cases alluded to, the heart affection was preceded by rheumatism of the limbs; in four, the pericarditis came on first, and was succeeded by acute rheumatism of the joints; in one patient, on the third day; in two, at the end of forty-eight hours; and in one, at the end of twenty-four.

The occurrence of inflammation about the heart always added to the duration of the illness; thus, of the 110 discharged within three weeks (and, as I have already said, cured within a fortnight), none had pericarditis; while it is among those who remained above a month that we find almost all our cases of that disease.

The fact of this complication being chiefly found in those who remained longest under treatment, must not, however, be understood as implying that the pericarditis supervened chiefly after a certain residence in the hospital; on the contrary, in the great majority of cases the patient was attacked at an early period, while in about one-third of the number the symptoms of the heart affection were fully developed at the period of their admission. Again, the prolonged stay of such cases in hospital was in a great measure owing to this—that I invariably made it a rule not to discharge them immediately on the subsidence of the symptoms, but to detain them until I had expended every effort to promote the re-absorption of any effused lymph, and to render the action of the heart as quiet as possible.

The following table gives the ages of those who had rheumatic pericarditis:—

Age.	Males.	Females.	Total.
10 to 15	3	1	4
15 — 20	9	7	16
20 — 25	6	10	16
25 — 30	4	6	10
30 — 35	3	0	3
35 — 40	0	0	0
40 — 45	1	0	1
45 — 50	1	0	1
50 — 55	0	0	0
55 — 60	1	0	1
	28	24	52

But few children are admitted into St. George's Hospital; but from what I have seen in private and dispensary practice, I am inclined to believe that the proportion of cases of rheumatic pericarditis is considerably greater in young subjects than in those more advanced in years. Of those referred to in the preceding table of cases of acute rheumatism, but eight were under fifteen years of age, and of these, four, or one-half, had pericarditis. Between 15 and 20, there were 48 patients, and of these 16 had pericarditis, or one-third; between 20 and 25 years of age there were 46 patients, and of these 16 had pericarditis, being very nearly the same proportion as the preceding; between 25 and 30, there were 42, and they afford only 10, or not quite one in four. After this the proportion of cases rapidly diminishes; for from 30 to 35 we have 27 cases of rheumatic fever, giving us only three of pericarditis, or one in nine; and from 35 to 40 we have also 27 cases of rheumatism, without one of pericarditis.

CAPSULAR RHEUMATISM.

Ages.	Males.	Females.	Total.
10 to 15	0	1	1
15 — 20	2	1	3
20 — 25	4	7	11
25 — 30	4	1	5
30 — 35	3	2	5
35 — 40	12	3	15
40 — 45	7	5	12
45 — 50	7	3	10
50 — 55	4	3	7
55 — 60	3	6	9
60 — 65	1	2	3
	47	34	81

According to the preceding table, capsular rheumatism would seem to be considerably more prevalent among men than women; much more equally diffused over the different periods of adult age than the form of the disease first described; and much more prone to affect persons under forty than genuine gout is. At the same time it is more the disease of middle life than either rheumatic fever or muscular rheumatism; from forty to forty-five years of age giving us twenty-two out of eighty-one cases, or rather more than one-

fourth, which is a much larger proportion than holds good with respect to either of the others.

CAPSULAR RHEUMATISM.—PERIOD OF TREATME NT.

	Cured.	Relieved	
1 week	0	0	Fatal disorganisation
2 —	8	1	of the joints . . 3
3 —	11	0	Urethral discharge 2
4 —	12	2	Inflammation of
6 —	13	3	the eye 2
8 —	13	0	
10 —	4	0	
12 —	4	0	
16 —	1	0	
20 —	1	0	
24 —	1	0	
	68	6	7

The most remarkable circumstance in this table is the length of time during which some of the patients were under treatment, as compared with those labouring under the other forms of the disease. Of the cases of acute rheumatism, properly so called, as we have seen, more than one-half were discharged within three weeks, whereas the number of those with capsular rheumatism discharged within the same period amounts only to twenty out of eighty-one, or within a fraction of one-fourth. Of the cases of rheumatic fever, one-half were discharged cured in three weeks; of the cases of capsular rheumatism, more than half remained in hospital at the end of six weeks.

CASES OF MUSCULAR RHEUMATISM.

Ages.	Males.	Females.	Total.
15 to 20	2	4	6
20 — 25	4	4	8
25 — 30	5	5	11
30 — 35	9	3	12
35 — 40	5	4	9
40 — 45	3	4	7
45 — 50	6	2	8
50 — 55	2	2	4
55 — 60	5	0	5
60 — 65	4	1	5
65 — 70	4	1	5
	49	31	80

So far as this table goes, it would seem to show a remarkable difference between the ages at which the fibrous and muscular forms of rheumatism are most prevalent. In the former instance, from fifteen to twenty years of age gave about *two*-thirds of the entire number of cases; here the same period gives only twenty-five out of eighty, being rather less than *one*-third. After the middle period of life, as we have seen above, the tendency to rheumatic fever progressively and rapidly diminishes. Not so with regard to the muscular form of the disease, which is spread more equally over the whole period of adult age: of the acute fibrous cases, only eight occurred between the ages of fifty and sixty, being rather more than one twenty-eighth part of the whole number; whereas the same period gives nine cases of the more chronic muscular form, being very nearly one-ninth of the whole.

MUSCULAR RHEUMATISM.—PERIOD OF TREATMENT.

1 week	2
2 —	11
3 —	18
4 —	21
6 —	14
8 —	6
10 — 11 — 12 —	5
Date of discharge not recorded .	3
Total	80

In about three-fourths of the above the pain was entirely, or almost entirely, removed; in the remaining fourth the disease was so far mitigated as to admit of the parties being made out-patients. But it must here be observed, that while the tables of the fibrous and synovial forms of the disease may be regarded as close approximations to the truth, that of muscular rheumatism is open to this objection,—that the majority of such cases are not admitted into the hospital, and do not enter at all into the above lists, which are confined to the very severe cases of what passes under the general denomination of chronic rheumatism.

The nervous and periosteal forms of the disease have not occurred in numbers or under circumstances to warrant any attempt at reducing them into a tabular form.*

CASE
OF
COMPLETE OBLITERATION OF THE AORTA.

By Dr. Roemer,

Professor of Anatomy at Vienna.

An officer, high in rank in the Austrian army, who had served during the war from 1770 to 1815, and had always enjoyed good health till his 45th year, went at that time to reside at Mayence. He then suffered frequently from dyspnœa and gastralgia, but did not apply for medical advice until he had had several attacks of threatened suffocation, and his stomach had refused to receive every kind of food. During a year he was treated homœopathically, without benefit. Severe palpitations then came on, accompanied by œdema of the extremities. The continued use of bismuth and digitalis made the dyspnœa and vomiting almost entirely disappear, but the pulse continued rapid, vibrating, and full. As his decease approached, he was seized with hoarseness and a small dry cough; aud at last he expired suddenly in his fiftieth year, while playing at whist.

* From Dr. Macleod's work on Rheumatism.

Post-mortem examination.—The contents of the cranium were healthy, with the exception of a softened and exsanguine state of the brain, and ossification of the basilar artery. Four ounces of serum were found at the base of the skull. The heart was considerably hypertrophied; the valves were healthy. The aorta, as far as the origin of the arteria innominata, was much dilated, which latter was almost twice its normal size. The subclavians and the left carotid artery did not appear unnaturally large. The coronary arteries were ossified to the extent of about three inches. From the origin of the arteria innominata, to the point where the ductus arteriosus enters, the aorta became gradually smaller, and at this latter spot the diameter did not exceed half an inch; it was there found obliterated to the same extent; its thoracic and abdominal portion was hardly as large as that of a child ten or twelve years old; the walls of these vessels were evidently thickened. The intercostal arteries, which arose below the obliteration, had nearly the diameter of a quarter of an inch, and communicated freely between the third and fourth ribs, with the mammary and thoracic arteries. It was by means of these anastomoses that the collateral circulation was established; the pulmonary arteries were greatly dilated; the left laryngeal recurrent nerve was greatly stretched, and the turn which it makes round the aorta corresponded to the obliterated point of that vessel. Biliary calculi were found in the gall-bladder. The lungs and other organs were healthy.—*Arch. Gén. de Médecine*, Dec. 1841, and *Edinburgh Monthly Journal.*

CAUTERISATION OF THE NECK OF THE UTERUS.

During the last three months of the past year M. Lisfranc has made a great number of experiments at the hospital of la Pitié, for the purpose of determining what is the best caustic that can be employed in cases where it may be necessary to cauterise the neck of the uterus. Simple ulcerations of this organ require the use of caustic, and it is now well ascertained that they are more or less rapidly healed by this means. Practitioners are equally in the habit of employing the nitrate of silver and the deuto-nitrate of mercury, but the circumstances which should guide us in the choice of either remedy have not been pointed out. From the numerous experiments instituted by M. Lisfranc, it would appear that hæmorrhage very rarely ensues after the use of the deuto-nitrate, while lunar caustic frequently occasions more or less abundant loss of blood. Hence it follows that, whenever ulceration of the neck of the uterus is accompanied, as it often is, by congestion or sub-inflammation of the organ, we must not employ the nitrate of silver, which has a tendency to increase the congestive state of the uterus.

During the last three months of the year 1841, 72 cauterisations were performed on eleven women affected with ulceration of the neck of the uterus; in 44 of these 72 operations, the nitrate of silver was used, and in 31 its employment was followed by a discharge of blood; on the other hand, the deuto-nitrate of mercury was used in 28 cases, and in 3 only occasioned a slight discharge.—*Bul. de Therap.*

VACCINATION.

Medical men, who are in the habit of vaccinating the children of the poor must have observed that the success of the operation is often impeded by the dry and flaccid condition of the skin to which the matter is applied. To remedy this inconvenience, M. Hulard, of Rouen, proposes the preliminary application of one or two small cupping-glasses over the part, for the purpose of stimulating its vitality, and affirms that he has had recourse to this method with the best results in a great number of cases.—*Ibid.*

ROYAL COLLEGE OF SURGEONS IN LONDON.

List of Gentlemen admitted Members on Friday, April 1, 1842.

Joseph Thomas Fletcher, Arthur Gillot, Michael Allen Jane, Francis Southam, William Row, William Mitchelmore, John Pegge, William Pocock, Michael Hudson, Peter Montague Pope, James Dunn, Arthur James Cumming.

APOTHECARIES' HALL.

Licentiates admitted on Thursday, March 24, 1842.

W. V. Beadle, Bristol; H. Wright, March, Cambridgeshire; W. R. Shiell, Newcastle-on-Tyne; R. Roper, Sheffield; H. B. Square, Kingsbridge, Devon.

CORRESPONDENTS.

The letters of *Dr. Chambers*, *Mr. Buckell*, *Mr. Kempson*, *Dr. Miles*, *Mr. Beadles*, &c., have been received, and shall be attended to.

New Members of the Provincial Association are informed that they can receive back numbers of the Journal, to January 1, 1842, by sending to us the name of a country bookseller, through whom they may be forwarded.

We thank *Mr. Crosse* for his communication on the certificates for lunatics; it shall appear in our next number.

COMMUNICATIONS, JOURNALS, AND BOOKS FOR REVIEW, TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND, OR 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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COURSE OF CLINICAL LECTURES
ON
SURGICAL DISEASES,
DELIVERED AT THE HOSPITAL OF LA CHARITÉ,
By Professor Velpeau.

Lecture XVIII.

TREATMENT OF GONORRHŒA.

Gentlemen,—In the history of medicine there is, perhaps, no disease for which so many infallible remedies have been discovered as gonorrhœa. The reason of this is evident. You all know that, in a great number of cases, gonorrhœa will disappear, after a month or two, without any treatment whatever; and hence, unless a remedy be injurious, it will not interrupt the natural tendency to a cure.

The means employed in the treatment of gonorrhœa are either general or local; in the present lecture, however, I shall confine myself to the consideration of the former. These may be distinguished into two classes—one consisting of mild remedies, the other more or less active and prompt in their effects; and it is the latter class which supports the charlatan.

Amongst the active remedies, the most remarkable are copaiva and cubebs; we have also gunpowder, which soldiers frequently employ, and with which I made several experiments in the year 1836. Tincture of iodine was warmly praised by an Italian surgeon, M. Broglia; but I made five or six trials of this remedy at la Pitié, and am convinced that it is of no value. The same remark applies to the balsam of styrax, which I also tried without effect; and here I may mention an incident worth noticing. One of the patients took a dose of the styrax ointment instead of the balsam, and suffered no inconvenience whatever from it. Tannin likewise has been said to arrest gonorrhœa in three or four days; but on administering it to patients at la Pitié I did not obtain any favourable results. I shall not detain you by going through the immense lists of remedies which have been recommended for the disease now under consideration; the greater part of them are only worthy of quacks and old women, and have no effect whatever on the discharge. Let us, therefore, turn to those on which the surgeon can place some reliance.

You all know that soldiers affirm gunpowder, dissolved in brandy, to be the most efficacious remedy for gonorrhœa; they will tell you that they have seen hundreds of cases cured in this way. I was determined to test the value of this remedy, and to discover on which of the ingredients of powder (granting it to be efficacious) its action depended; with this object I administered the ingredients separately.

The nitrate of potass was first tried in the dose of half an ounce daily; it was even carried to two ounces during the day, but with no other effect than that of deranging the digestive organs. Experiments made with sulphur and charcoal, separately, gave the same result. I then tried the gunpowder; it produced violent colic and nausea, and when it was given in brandy no patient could be induced to take it longer than three days; the discharge was never arrested by it.

We now come to copaiva and cubebs. And first I would remark, that any of you who have followed my practice in this hospital must be convinced of the error of those who assert that cubebs is more liable to irritate than copaiva. Eighteen out of twenty patients will bear the remedy well. One patient labouring under an old gonorrhœa had completely lost his appetite, and was much enfeebled; after he had taken the cubebs for some time his health was visibly improved. On the other hand, several patients were compelled to renounce the use of copaiva, when administered by itself.

Cubebs, then, is a medicine more easily supported, but it is less efficacious. The following is the mode in which I am accustomed to administer it:—I commence by giving a drachm thrice a day, at morning, noon, and night. If the stomach bear it well, I gradually increase the dose to six drachms daily. It must be given in powder, and you should take care to procure it fresh, for I am convinced that cubebs loses much of its efficacy by being kept for any length of time. Many of you have seen the discharge arrested on the second or third day by cubebs; in some cases even within twenty-four hours. It is, therefore, impossible to doubt its efficacy. But you should not continue it beyond the fourth day; if it produce no effect by that time, it may be laid aside as useless.

Copaiva is the next remedy which we have to notice. It is, as you all know, excessively disagreeable, and gives rise to nausea, vomiting, &c.; hence many attempts have been made to mask its taste. Chopart mixed it with alcohol and other substances; but many patients cannot bear even Chopart's mixture. It has been mixed with sugar, but the nauseous taste still predominates; besides, the efficacy of the remedy is diminished in proportion to the saccharine qualities of the substances mixed with it.

Being desirous of avoiding the effects of copaiva on the stomach, I made several trials of this remedy in the form of enema. From one to four drachms of copaiva were mixed with four ounces of gum emulsion, containing some camphor and opium. I began with a drachm of the copaiva, and increased the dose by a drachm every day; the enema was thrown up thrice daily. There was a great obstacle, however, to this mode of treatment. Most of the patients were unable to keep the enema; but those who did were cured in three or four days. From these facts, and others observed by different surgeons since, I am in-

clined to think that this mode of giving the balsam, when the patient can retain it, is as efficacious as any other.

The best method, Gentlemen, is to unite the two substances together. The following is the formula for the mixture which I have been in the habit of employing for several years:—Two drachms of copaiva, four to six drachms of cubebs, and two grains of opium, are made up into a paste with magnesia; this is divided into six parts, and taken in two days. Three doses are generally sufficient to effect the cure. In some cases the discharge is arrested after the second day; but you must not suspend the remedy as soon as this occurs, for the discharge would return in greater abundance. You must continue your treatment for some time. After the first dose, allow the patient to rest for a day; on the fourth day you give another dose, and on the seventh a third. Some writers pretend that the use of copaiva and cubebs is apt to induce metastasis of the inflammation to the joints, &c. I do not think that this is the case; a mere coincidence has been confounded with an effect. It is true that arthritis frequently occurs in persons labouring under gonorrhœa, and the discharge may be a predisposing course of this affection; but we are not to conclude from this that gonorrhœal arthritis arises from the use of cubebs and copaiva. The occurrence of a rash, somewhat similar to measles, is more evidently connected with the administration of these remedies; but the effect is of so little consequence that it scarcely deserves notice.

It is impossible to deny that the remedies just mentioned exercise a certain influence on the urinary organs. The urine is strongly impregnated with their odour; some writers pretend that they act as revulsives; but I cannot admit this, for their anti-gonorrhœal effect is greater in proportion to their want of action on the digestive tube. In a word, the best constitutional treatment of gonorrhœa consists in the administration of copaiva and cubebs united together.

While speaking of the general treatment of gonorrhœa, I have not touched on the use of blood-letting; on this point, therefore, I shall now lay before you a few practical observations. Some surgeons pretend that they have cured great numbers of cases of gonorrhœa by abstracting blood in proportion to the constitution of the patient, and the intensity of the inflammation, assisting the effect of the blood-letting by emollient drinks, poultices, baths, &c., and abstinence from food. I do not think that much reliance can be placed in these measures. In some cases we are compelled to have recourse to them, by the inflammation of the urethra; but they are then auxiliary and not curative measures. Thus, whenever the patient complains of excessive pain and sensation of burning in the urethra—of the symptoms, in a word, which denote inflammation—you must employ antiphlogistic remedies at once; but although you may cut short the inflammation, the gonorrhœal discharge will persist, or, if it be suspended for a short time, will return again. Daily experience proves this to be the case. You cannot, then, depend on the antiphlogistic plan alone, but combine it with remedies directed against the complaint, and then, in certain cases, you will obtain the best effects from it.

Let us now consider the external or local treatment of gonorrhœa. Here, likewise, we find a great variety of remedies, each of which has its supporters. Topical applications are placed in contact, either directly with the urethra or with the integuments immediately connected with that canal. Let us take a rapid view of the latter. Some writers pretend that gonorrhœa has been cured in six or eight days by mercurial frictions along the urethra; I have tried this mode of treatment on several patients, but do not think much of it; as an auxiliary it may be useful, when the urethra is hard or knotty, and when we have reason to suspect the existence of ulceration in the interior of the canal. Very small blisters have been applied along the course of the urethra. M. Poirson is accustomed to apply them, of the size of a two franc piece, from the anus to the root of the scrotum, or along the perineum, and says that he has found them very useful in cases of old clap. I tried this plan on six patients; two were rapidly cured, but in the remaining four the disease was only modified; the discharge would cease, and then break out again, and other means were required to obtain a permanent cure.

As to frictions with the preparations of iodine and other active substances of the same kind, I regard them merely as auxiliary means, and to be had recourse to under particular circumstances.

It is now time to consider those substances which act immediately on the mucous lining of the urethra. Almost every substance comprised under the class of emollients or astringents has been tried in the form of injection. It is difficult to imagine how emollients alone can arrest a gonorrhœal discharge, especially if it be of long standing; a curious mode of using injections has been lately invented; the patient is placed for several hours in a tepid bath, and constantly throws some emollient fluid into his urethra; the treatment is continued for a week at least. You can readily imagine that this method will never be generally adopted, even supposing it to be efficacious.

It is unnecessary for me to dwell on injections containing the acetate of lead, red wine, and other mild astringent substances; these are more or less useful, but I prefer passing at once to a consideration of the more efficacious substances, such as sulphate of zinc, copaiva, deuto-nitrate of mercury, and nitrate of silver.

Injections of sulphate of zinc have been employed in the treatment of gonorrhœa for a great length of time past, and experience proves their efficacy; but with respect to this substance and its use I would make two remarks. In cases of recent gonorrhœa little benefit will be derived from the zinc; but in gleets and cases of long standing gonorrhœa, the effects of sulphate of zinc are truly remarkable. It should be injected in the proportion of one grain to the ounce of some mucilaginous decoction; no advantage is derived from employing stronger injections. The beneficial effects of copaiva, when administered internally, naturally led to the idea of employing it in injection. M. H. Larrey has used it in this way with the best effects, at *Val-de-Grace*. When the injection has been thrown in, it must be retained in the canal for a few minutes; it is used two or three times a day, and frequently effects a cure in five or six days. Some time ago injections with the deuto-nitrate of mercury were very highly spoken of. Some surgeons

went so far as to say that this substance never failed to cut short the most obstinate gonorrhœa. Be on your guard, Gentlemen, whenever you hear any particular remedy or mode of treatment praised in this pompous manner.

I tried the deuto-nitrate of mercury on several patients; in some cases I injected five or six drops in a glassful of a mucilaginous fluid, but without any benefit. I then increased the quantity in other cases, and the discharge, instead of stopping, was much increased; I, therefore, abandoned the remedy as useless.

The nitrate of silver, as you know, is a substance which has been of late very extensively employed. In ulceration of the cornea, erysipelas, cutaneous affections, and a great variety of other diseases, it has been used with more or less success. Its action on venereal chancre and syphilitic ulcers of the throat is well known. Opinions, however, are divided on the utility of this substance, as an injection, in gonorrhœa. I have made numerous experiments with the lunar caustic in various quantities; in the proportion of one grain to the ounce of water, I have obtained excellent results, especially in old cases. In four cases I tried two grains to the ounce, and two of the patients were cured in five days. In cases of long standing, then, the nitrate of silver injection is efficacious. In recent cases it may also be employed; but its efficacy is greatly increased by pressure applied methodically to the canal of the urethra. For the latter purpose I employ small compresses, which I apply as exactly as possible along the course of the urethra, from the bulb to the fossa navicularis, and which I support with a small bandage. Before tightening the bandage I inject a solution of one or two grains of nitrate of silver to the ounce of water, and keep the injection in the canal for one or two minutes; this I repeat two or three times in succession, and twice a day. The pressure must be permanent to have any effect; you will be forced, therefore, to renew the bandage frequently, and on this account, perhaps, it might be useful to impregnate it with starch, as we do in the treatment of fracture. I repeat the injections for three days, and then suspend them; if necessary they may be resumed. In this way I have cured five or six patients labouring under gonorrhœa, in whom every other species of treatment had been tried without success.

I must, however, warn you of certain accidents that may occur during this mode of treatment. Thus the glans penis and prepuce may become swollen, livid, or even inflamed; but you need not be alarmed at this, unless you have pushed compression too far. Should the patient be tormented with frequent erections, and suffer much, you must employ baths, lavements, &c., with narcotics, but do not suspend the use of compression unless you are compelled so to do. To the treatment of gonorrhœa with astringent injections, several objections have been made; amongst these there are two which I cannot pass over in silence. First, it has been affirmed that the injection may pass into the bladder, and there excite violent inflammation. This I believe is a mere chimera; and even if inflammation were to arise, we could soon master it by appropriate means. Second, the injections, it is said, often give rise to stricture. This also I do not believe. Stricture is generally the effect of induration of the tissues, cause by long continued inflammation; and we cannot admit that any treatment which cuts short the inflammation can tend to produce its effects. Besides, experience proves that stricture does not follow the use of astringent injections.

In conclusion, Gentlemen, I would say that astringent injections are the best remedies we can employ in the treatment of gonorrhœa, especially if the disease be of some standing, and that the nitrate of silver, with compression, is the one which we should select.

ON

STRICTURE OF THE URETHRA,

AND

HYPERTROPHY OF THE BLADDER.

By M. Cruveilhier.

Stricture of the urethra is the most common cause of retention of urine, and of a majority of the diseases to which the urinary organs are subject.

In my opinion, modern writers have gratuitously multiplied the number of organic changes which occur in strictures of the urethra. For my part, I have never met with more than one species of stricture—viz., the fibrous, or, to speak more correctly, the fibrous degeneration of the walls of the urethra, occupying either a single point of the canal all round, and thus forming the ring-stricture, or extending along the canal to a length of four, six, eight, twelve lines, or more.

Besides, this distinction of strictures, according to their extent, we may admit superficial strictures, which are confined to the mucous membrane, and deep-seated strictures, in which the whole thickness of the urethra is changed into fibrous tissue. With respect to seat, the stricture may occupy any point between the orifice of the urethra and the prostatic portion, but it is almost always confined to the membranous or bulbous portions of the canal. I have never seen a stricture in the prostatic portion of the urethra. The following description of the appearances of different strictures is taken from dissections which were made with the utmost care:—

Stricture—False Passage through the Corpus Cavernosum—Gangrene—Death.

On opening the urethra, a false passage was observed; the instrument had traversed the upper wall of the canal, passed through the corpus cavernosum, and again entered the urethra. The stricture was four or five lines long; it was dense, fibrous, and the change of structure occupied the whole thickness of the canal; some pus was infiltrated throughout the corpus cavernosum, and the cellular tissue of the perineum was the seat of a gangrenous abscess; a portion of the lung was in a state of grey hepatisation.

Perhaps in this case the inflammation of the lung depended on the existence of pus in the corpus cavernosum. In analogous cases I have found numerous abscesses in the liver and spleen. Pus in the corpus cavernosum is placed under the same circumstances as if it were in the veins, and unless it is

immediately circumscribed by adhesive inflammation, may pass into the circulation, and produce all the effects of purulent infection.

Incontinence of Urine from Diseased Prostate—Hypertrophy of the Bladder.

An old man, 71 years of age, was admitted into Bicetre, on the 20th of October, 1834, with retention of urine; the latter had been preceded by habitual incontinence, but the patient could give no information on the origin of his disease. A catheter was easily passed into the bladder, and allowed to remain there for fifteen days. It was then withdrawn, because the urine escaped between the instrument and the urethra; the incontinence returned.

The man now fell into a dangerous state; he was sounded every morning, and a small quantity of purulent and excessively fetid urine was drawn off; and although introduced with the greatest care, the end of the catheter was always tinged with blood, and of a very black colour when withdrawn. On the 10th of November an urinary abscess formed in front of the scrotum, and the man died on the 14th.

Post-mortem. — The bladder contained a small quantity of purulent urine, and a mulberry calculus as large as a walnut. The walls of the bladder were considerably hypertrophied; this condition, however, was confined to the muscular tissue, and the fatty layer between the latter and the peritoneum. The whole of the inner surface of the bladder was lined with an irregular false membrane. The prostate completely embraced the urethra; around the lower half it was very imperfectly developed, but at the upper was extremely thick and solid. The substance of the kidneys was healthy, but the cavities of their pelvis were livid, and lined with pus; the vesiculæ seminales, also, were distended with pus, and at the lower part of the urethra, in front of the scrotum, there was a large opening.

REMARKS.

From the hypertrophy of the bladder in this case, together with its size, I am inclined to think that the incontinence of urine under which the patient laboured so long was a retention with regurgitation. The hypertrophy of the subperitoneal fatty layer would lead to the idea that the bladder remained for a great length of time inactive, and merely allowed the urine to escape as it received it. The coincidence of urinary calculus with disease of the prostate has been frequently observed, and should not be overlooked in the treatment of the latter. We should also remember that the existence of the stone may be overlooked in cases of this kind, from the difficulty of exploring the floor of the bladder; still we can make the proper examination by employing the sounds proposed by MM. Leroy or Mercier for this purpose.

The lobular arrangement of the lower portion of the prostate explains the retention of urine, and also the incontinence, when the lobes which projected into the neck of the bladder were separated from each other, as the organ became distended; they also explain why it was easy to introduce a catheter, which passed along the grooves between the prostatic lobes. The lower half of the prostate, then, was in this case made up of a number of distinct lobes, which projected separately into the bladder. As to the thick portion of prostate which embraced the upper part of the urethra, this has been occasionally seen.

In this and several other cases, I have been able to ascertain that the prostate is contained between two layers of muscle sent off from the bladder; one external and very thick; the other internal, thin, and placed between the mucous membrane and tissue of the prostate; and finally, that the prostate is traversed by a number of muscular fibres sent to it from the bladder. The thickness of the external prostatic layer, and the thinness of the internal one, explain why, in cases of hypertrophy of the prostate, its lobes always project into the bladder, and never externally to it.

The destruction of the walls of the urethra, in this case, and the infiltration of urine which ensued, were occasioned by the permanently keeping a catheter in the bladder. It is worthy of mention that I have never yet seen partial or complete hypertrophy of the prostate coincide with stricture of the urethra; nay, more, stricture of the membranous portion of the canal is almost always attended by more or less complete atrophy of the prostate gland, which often depends on chronic inflammation of the part. The two following facts support this idea :—

Fibrous Stricture of the Urethra—Atrophy of the Prostate.

I found, in a dead body, a stricture of the urethra occupying the bulbous and adjoining membranous part of the canal; it was fibrous, and was from eight to nine lines in length. At the centre of the stricture the fibrous degeneration comprised the mucous membrane and the spongy tissue of the urethra; but towards the extremities it was confined to the mucous membrane alone. The stricture, with the neighbouring portions of the urethra, thus resembled two cones applied to each other. The urethra, between the stricture and bladder, was remarkably dilated; the verumontanum was much developed, and connected to the neck of the bladder by several bands. On pressing the prostatic portion of the urethra a small quantity of purulent matter escaped through the orifices in the verumontanum and its neighbourhood. The prostate gland, which appeared to be large, was converted into an abscess, divided into two parts by an imperfect septum; the abscess was traversed by numerous filaments, probably the vessels and excretory ducts. The bladder was small and greatly hypertrophied; it was from four to five lines in thickness, and divided, by muscular bands, into pouches, but did not contain any calculi.

Prostate converted into a Cyst containing a Calculus.

A patient was admitted into hospital for a retention of urine, which he said had existed for several years. It was impossible to pass a catheter. The bladder could not be felt above the pubis, and the operation of puncture was delayed. The patient soon died.

Post-mortem.—Bladder very thick; gangrene extending through the mucous and muscular coats, at the posterior part; a white calculus projected into the urethra, immediately in front of the neck of the bladder; the stone occupied the site of the prostate gland, which had been converted into a mere cyst. In the membranous portion of the canal there was a dense, circular stricture; the ureters were dilated and flexuous; the pelvis and calices of the kidneys were

also much distended, but the substance of the kidneys was atrophied. The body of the right testicle contained several tubercles, and the epididymis was infiltrated with tubercular matter.

Here the various diseases of the genito-urinary system were probably consequent on the stricture of the urethra. Had the finger been passed into the rectum, the tumour would have been mistaken for an enlarged prostate; had it been known to be a calculus, nothing would have been more easy than to extract it through the rectum.

Circular Stricture—Enormous Distension of the Bladder.

M. Berard presented to the Anatomical Society a bladder enormously distended, and reaching up to the umbilicus; there was a ring stricture, at about three inches from the external orifice of the urethra. The bottom of the bladder presented a number of small granulations, like millet seeds; these are nothing but mucous follicles, which are invisible in a healthy condition of the organ.

Complete Obliteration of the Urethra—Gangrene of the Bladder.

M. Bosc presented to the Anatomical Society the urinary organs of a man in whom the urethra was completely obliterated in front of the scrotum; there were several urinary fistulæ, and the bladder was perforated in three different parts, but the loss of substance was closed by the intestines. An eschar was found in the bladder, exactly similar to the part of the bladder from which it had been detached. Several members of the society thought that it was merely a false membrane, but I am convinced that it was a true eschar.

Stricture—Fistula—Calculi.

M. Thomas presented to the Anatomical Society the urinary organs of a man who had laboured under retention of urine for the last twenty years, and who passed his urine pretty freely by introducing a large bougie as far as the middle of the urethra. The man had no children, and having heard that this probably depended on his stricture, he resolved on going into hospital. It was impossible to pass a common sound into the bladder; a conical one was, therefore, introduced, and it was thought that it passed into the bladder, but nothing but blood came away. The man was seized next day with œdema of the glottis, and died on the following day.

The anterior half of the urethra was healthy; from its middle point there passed two canals; one, which seemed to lead to the bladder, was gangrenous, and contained one large and several small calculi; the other was surrounded by dense, fibrous tissue, and led to a large cavity in the prostate gland, filled with calculi. The prostatic pouch communicated with the bladder, and was divided into two compartments by an imperfect septum.

REMARKS.

The *fibrous* nature of stricture of the urethra seems to me to be clearly demonstrated, for I repeat that I have never seen any other form of the disease. At the strictured point the mucous membrane of the urethra completely disappears, and the spongy tissue more or less so. If we endeavour to discover the cause of this fibrous degeneration, we shall perceive that it may be explained, first, by chronic inflammation of the mucous membrane; second, by ulceration. We possess, however, too limited a number of facts relative to the state of the urethra in gonorrhœa to determine the question; for my part, I am inclined to think that strictures are the result of ulceration; for, if we admit inflammation as the cause, it is difficult to conceive how its effects should be limited to a single point of the urethra.

The therapeutic inductions derived from a knowledge of the fibrous nature of stricture are perfectly in accordance with facts. The inconveniences of forced catheterism, and of conical sounds, the superiority of dilatation over cauterisation, the necessity of continuing dilatation for a considerable length of time, the tendency of stricture, of return, and the absolute necessity of having recourse, from time to time, to some means of dilatation—these are the therapeutical inductions furnished by the pathological anatomy of stricture.

It is as difficult a matter to re-establish a natural canal, when changed into fibrous tissue, as it is to make an artificial canal. Morbid fibrous tissue has a tendency to become thick and dense under the least irritation.—*Annales de Chir. Franc.*, February, 1842.

PERFORATION OF A BRONCHIAL TUBE.—SUDDEN DEATH.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Should you think the following case of sufficient interest for publication in your Journal, I shall feel obliged by your inserting it.

Your obedient servant,
ALLEN J. TAYLOR,
House Surgeon.

Newcastle Infirmary,
April 4, 1842.

James Allen, aged 40, ostler, admitted on the evening of February 29, 1842. He required to be supported by two assistants; is a strong-built man, of a corpulent appearance. Little of the history of his illness can be gained from himself or attendants, except that he has been out of health for four months, complaining of some cough and dyspnœa, but able to follow his usual employment; he has had no medical advice. A few days ago he was observed to be much altered in his appearance for the worse; great prostration of strength, urgent dyspnœa, troublesome cough, and severe pain of the side. These symptoms have continued increasing, and he now presents a pallid, anxious countenance bedewed with copious, clammy perspiration; eyes vacant; intelligence impaired; respiration hurried and laborious, attended with loud mucous rattling; pulse very feeble and rapid; voice low and hoarse; complains of acute pain in lower part of left side, much increased on coughing; wandering pains about chest; and frequent troublesome cough. Being anxious to get him to bed with as little delay as possible, a hasty examination only of the chest was made with his clothes on; percussion was not used; no respiration audible in left chest; respiration attended in right side of chest with loud mucous

râle all over; heart's sounds distant and feeble, with an intermission at the end of every three or four beats, followed by a strong impulse against the ribs; the heart did not appear to be displaced. He suddenly expired when being put to bed.

Post-mortem following Day.—On percussing the chest the left anterior portion sounded tympanitic over its entire surface, but in a less degree in the infra-clavicular region; the right was clear, but not tympanitic; the body loaded with fat; muscles not wasted; abdomen large. On cutting into the chest there issued from the left side a quantity of very fetid gas; the left side also contained several pints of turbid milky serum; the lung was completely compressed against the spinal column; the pleura costalis and pulmonalis coated with a thin layer of coagulated lymph; the right pleura healthy; the lung of dark colour, much engorged with serum; the edge of lower lobe emphysematous; the left lung on the anterior surface of its lower lobe presented a circular aperture with defined edges, which would nearly admit the end of the little finger. On laying the lung open from its posterior part, a small cavity was exposed, having a few patches of coagulated lymph on its walls, and extending upwards and inwards for an inch and a half communicating with a bronchial tube. No tubercles existed in either lung.

CASE
OF
SPONTANEOUS RUPTURE OF THE SPLEEN.

By G. Bodichon, M.D., Algiers.

On the 18th of October, 1838, a man was found dead not far from the fort Oued-el-Kerma. Some suspicion of violence having been entertained by the authorities, an investigation of the cause of death was made.

The man was a retired soldier of the foreign legion, and for several years had been subject to repeated attacks of intermittent fever, which had returned with great violence during the last few weeks. The persons by whom he was employed remarked that his respiration was considerably impeded, and the left side of the abdomen greatly swollen. On the morning of the day on which he died he eat his breakfast as usual, and then drove out the cattle to pasture; he had, however, proceeded only a few hundred paces, when he was seen to sit down on the ground, roll over into a pool, and immediately expire. The body was examined on the 19th. There was no trace of external violence. The abdomen was greatly distended, and, on its being punctured, a very great quantity of blood escaped; the lungs and heart were collapsed, and remarkably devoid of blood; the spleen occupied the whole of the left side of the abdomen, extending from the level of the sixth rib into the pelvis, and projecting laterally beyond the edge of the linea alba. On the anterior surface of the organ there was a laceration of two inches in length by one in breadth. The splenic artery was as large as a goose-quill, and the vein was four or five times its usual size. The parenchyma of the organ presented numerous cells, large enough to receive the end of a catheter; and this arrangement was particularly evident in the neighbourhood of the lacerated part.

In this case, then, the hypertrophy and laceration of the spleen evidently depended on the congestion produced by the frequent accesses of intermittent fever; the cellulo-vascular tissue of the organ was one large mass of aneurismal varix, and at length gave way under the distension to which it was subjected.—*Journ. des. Connais.*, No. 4, 1842.

MONSTROSITY.

REMOVAL OF A SUPERNUMERARY LOWER LIMB.

The particulars of the following curious case were lately communicated to the Medical Society of Montpellier, by Professor Delmas:—

The subject of this case, at the time of birth, presented the following appearances. The head, chest, and spine were perfectly well-formed. The right lower extremity was much smaller than the left, but the bones of the limb did not seem to be affected.

On a level with the edge of the ribs, on the right side, near the region of the gall-bladder, there was a *third* lower extremity, composed of a foot, leg, thigh, and iliac bone; the foot and leg of this supernumerary limb were much smaller in proportion than the thigh; its different articulations were immovable. From the play of the ribs it was impossible to ascertain whether the iliac bone was merely placed over or intimately connected with them; nor could it be ascertained with what parts the inner surface of the bone was in contact. The functions of respiration, &c., however, were not disturbed in any way.

From the lower edge of the iliac bone there projected a large hernial tumour, which appeared to contain at least one half of the abdominal viscera, and a small, firm body, of the consistence of the spleen. At the point where the edge of the hernial tumour joined the root of the supernumerary limb there was a small empty scrotum, with a small penis, furnished with a glans, but no prepuce; from the extremity of this penis urine was occasionally discharged, and hence it was concluded that the hernial tumour contained a kidney with a supernumerary bladder.

The circumstances just related induced the surgeon (M. Bonnefoux, of Rhodez) who attended the infant, not to attempt the removal of the iliac bone, but merely remove the supernumerary limb from its joint. This was done when the child had attained the age of six weeks. All the vessels were tied as they were divided, and the limb disarticulated before the femoral artery was cut through; very little blood was thus lost. Since the operation the right lower extremity increased rapidly, and is now exactly similar in appearance to the left. The hernial tumour has manifestly diminished in size.

M. Delmas attributes the success of this operation, the performance of which he had recommended, to the circumstance that surgical operations on infants generally turn out well.

The normal urinary apparatus of the child now performs all its functions in the usual way. From the small supernumerary penis, however, the urine generally passes drop by drop; when the child cries

it is forced out in a stream. The supernumerary limb was never observed to execute any independent movements; besides, the muscular tissue was almost completely atrophied, but the nerves of the limb were well developed.—*Journ. des. Connais.*, No. 4, 1842.

IMPORTANT MEDICO-LEGAL CASE.

DEATH AFTER A BLOW.—BURSTING OF AN AORTIC ANEURISM INTO THE LEFT BRONCHUS.

On the 8th of February last Mr. James Goss, second master of her Majesty's ship Impregnable, then lying in Malta Harbour, struck a man named Edward Purvis on the face. Purvis stooped down, picked up his cap, appeared violently excited by the blow, shouted passionately that he would go and report Mr. Goss to the captain, ran up the main ladder, and then again on to the upper deck; but instead of proceeding to the captain, he suddenly rushed to a water-bucket, and began to drink, and immediately afterwards to eject an immense quantity of blood from the mouth. In five minutes more he was dead, probably about seven minutes from the time the blow was inflicted. Dr. Martin, deputy-inspector, with the surgeons of some of the ships in harbour, were directed to form a board of inquiry upon the cause of the man's death, and Mr. Wells, assistant-surgeon of Malta Hospital, was directed by Dr. Martin to make the post-mortem examination in their presence. The following is the report of the surgeons drawn up after that examination :—

" Her Majesty's ship Impregnable,
Malta, Feb. 8, 1842.

Sir,—In compliance with your order we have this afternoon examined the body of Edward Purvis, late quarter-master of this ship, who died this morning, and found as follows :—There was no external mark of injury whatever on the body; there was a considerable quantity of frothy mucus tinged with blood exuding from the mouth and nostrils; and the external veins of the body were unusually turgid.

On examining the chest we found the left lung greatly engorged with blood, and on removing it from the body the whole of its substance, together with the air-passages, were found filled with blood. There were strong adhesions of the right lung to the side of the chest, with extravasation of blood, but not to the same extent as in the left lung.

There was an aneurism of the arch of the aorta where it crosses the windpipe, about the size of a large walnut, and the aneurism had burst into the windpipe.

Absorption of the anterior portions of the bodies of the fourth and fifth vertebræ had taken place, which had evidently been caused by the pressure of the aneurism.

The heart was of the usual size, and apparently healthy.

The stomach was healthy, but contained a large quantity of blood mixed with its contents. The other abdominal viscera were sound, nor was there any disease to be discovered in the brain or its appendages.

We have the honour to be, &c.,
H. Leyson, Surgeon of H.M.S. Impregnable.
J. Wilson (D), Surgeon of H.M.S. Vanguard.
C. M'Arthur, M.D., Surgeon of H.M.S. Howe."

On the 17th of February a court-martial, of which Rear-Admiral Sir John Louis, Bart., was the president, assembled for the trial of Mr. Goss, when the principal defence of the prisoner, of course, was founded upon the medical evidence. Dr. M'Arthur declared that " from the appearance of the aneurismal sac, it must have been on the point of bursting for some time previous to the deceased's death." Dr. Leyson deposed that " the deceased could not, under the circumstances of the disease, have lived any length of time;" and he said he thought that the bursting of the blood-vessel had no connection with the blow on the cheek. Dr. Martin also stated that " the blow on the cheek could not have produced the bursting of the aneurism." Under these circumstances the court declared the charge " proved in part," and condemned the prisoner to be dismissed from her Majesty's service."

We are not aware of any case on record similar to the above. Gordon Smith, Mott, and Dupuy give cases in which, under violent fits of anger, a large abscess of the liver had burst into the peritoneum; an abscess in the parietes of the heart had burst, causing rupture of the left ventricle; and a rupture of the duodenum was found without marks of external injury. But in none of these cases had there been any blow. Christison relates the case of a man who got two blows on the nose and forehead, and died in seven minutes; on dissection, half a pint of reddish serum was found in the ventricles of the brain. It appears plain that, in the above case, violent excitement caused by the blow occasioned the bursting of the aneurism, and that any excitement, equal in degree, would probably have had the same effect; but it still is difficult to deny that the blow caused death. It is impossible to say how long a man might live with a small aortic aneurism, and it is evident that death, at any rate, was *hastened* by the blow. Still, as it has been held that previous injury or disease forms a good exculpatory plea, if the new injury was inadequate to cause serious mischief in ordinary cases, and that the previous disease rather than the new injury caused death, the sentence was probably fair. Goss was acquitted of manslaughter, but dismissed the service for having struck the blow. How would this compromise have been effected in civil courts?

The morbid preparation in this case will be an exceedingly interesting one, and we understand that it has been preserved by Mr. Wells for the museum of Haslar Hospital.

PREMIUMS TO MEDICAL STUDENTS.

In a lecture by Dr. Houston, one of the surgeons to the City of Dublin Hospital, which was recently published in the "Medical Press," we find the following remarks on the custom of giving prizes to medical students :—

" You may be disposed to consider our system of instruction still imperfect, inasmuch as premiums are not offered by us as incentives to zeal and industry in study. I deem it right, therefore, to make a few observations on this point, and to state our reasons for holding back from conformity to this usage.

We tried the experiment for two sessions, in the

full anticipation that good would result from it,—that the pupils would be encouraged to emulation in study, and that the best man would get the first premium. We gave six valuable premiums in two sessions; and who think you were the individuals who each time received them? They were the most junior students in the hospital—gentlemen, I admit, of superior talent and industry, and who justly merited praise so far, but who were not, in virtue thereof, entitled to be set forth to the public, by a specious document in the form of a premium, as the most learned and experienced students of the class attending the hospital during the session, in which such premiums were adjudicated. They got them, because the senior students—gentlemen of greater practical experience, and whose characters were much at stake, declined, for the paltry value of the prize, putting themselves in competition with juniors, whose knowledge must of necessity be partial and scanty; to whom it would not under the circumstances, involve any loss of reputation to be beaten; for whom a prize would be great gain and in whose favour, after all, chance might readily turn the scale: and so far actually did this feeling operate, even exclusively of the case of seniors as competitors, that even from amongst the juniors, in both our experiments, there were only, out of a class of between eighty and ninety students, candidates equal in number to the number of premiums offered by us; so that, in the end, all that the examiners had to determine was, which should have the first, which the second, and which the third prize; and yet each of these *unrivalled* gentlemen, received his premium and exhibited it as a trophy of a great victory—not satisfied indeed, even as the matter stood thus, for two of the parties considered themselves ill used, in not having obtained the first place. But the evil did not end here—it did not terminate in the uncalled for elevation of character, or the temporary exultation of one student over another. In after life, when men came to be competitors for public offices, this accidentally acquired bauble of the day has been used with undue effect in the race of competition; and that, not only against the actual competitors for the premium, but against all who attended the hospital for that, or even other sessions.

Premiums have a different effect in their operation upon students in medicine from that upon almost any other classes in society. The boy at school *must* subject himself to the ordeal of competition with his schoolfellows; he cannot escape, and a fair and just estimate of the respective merits of all can thereby be formed; the operation of the system upon them is good because it is compulsory. In the university the reputation of a premium is so great, that it becomes worth the while of any one to succeed: the ambition of all is kindled to secure it; and it is only the incompetent, or those whose attentions are otherwise directed, that desist from the competition. Moreover, although, to such, success may be great gain, defeat never becomes, in any wise, a source of after disparagement: promotion in the church, at the bar, or elsewhere, is not swayed by such a fortuitous incident. Here, likewise, the premium system is good, because, while it encourages and rewards learning, it offers no disparagement to the unsuccessful candidate. But in medicine, matters are very different: here there is no compulsory competition, and the senior will not compete with the junior; neither would the junior, if the more experienced student allowed himself to become a candidate, enter with him into the concours,—the contest in either case being unequal, and the prize altogether disproportioned to the risk of a failure.

But to take another ground, what is the predicament of a medical student as compared with the schoolboy or the lad entering college, that he should require to be coaxed along with bribes to the attainment of good professional skill? The schoolboy is whipped or rewarded, according to his taste, as the only means of preparing him advantageously for the exercise of the privileges of manhood: to a student entering the university, places of great honour and wealth—ample provisions for independence—are held up to his view, and the premiums given by alma mater during the collegiate course are only so many tests of the progress towards perfection of the aspirants to such honours: but how is it as regards the medical student? He should not require the whipping or the sugar-cakes of the schoolboy, nor is any prospect open to him of promotion in the college to which he may attach himself by the possession of such adventitious credentials. He is, to all intents and purposes, a man; he has linked himself to a profession which carries in it its own peculiar rewards; he has taken his stand for life, with his eyes open; and if feelings of ambition and a desire for success do not stimulate him to the necessary exertion, such paltry rewards as are only adapted for schoolboys will never lead him on to the goal.

Such are the grounds upon which we have abandoned the premium system. We have found it, not only ineffective as a comparative test of information in the student, but unfair to those who did not choose to become competitors; and in addition, we are of opinion that right-minded medical aspirants require no such incentives to the fulfilment of a duty with which their own interests are so closely interwoven."

PROVINCIAL MEDICAL JOURNAL

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In our last number we directed attention to some points connected with the new "medical order" of the poor-law commissioners. The order has been drawn up in a spirit of apparent liberality; but a careful examination will show that almost every clause is accompanied by a "provided always," which will enable the commissioners to relapse into their old system of oppression and injustice. Of this we have an example before us. By Article 6 of the order, it was enacted that no district should, henceforward, exceed in extent the area of 15,000 statute acres. This was, in all conscience, sufficient for the unfortunate union surgeon and his unfortunate cattle. Boards of guardians, however, think differently, and, with the assent of the commissioners, have already violated the spirit of the article. In an advertise

ment for medical officers, issued a few days back by the guardians of the Wimborne and Cranborne union, we find it stated that one district of the union contains 18,273 acres; another district, 17,760 acres; and a third district, 27,710 acres. This advertisement was issued within a week after the promulgation of the "order" of the poor-law commissioners. It is, therefore, clear that the commissioners are unwilling or unable to carry their regulations into effect, and that the amendments which they have announced with so much pomp and pretension exist merely upon paper—and in the imagination of their friend, Mr. Guthrie.

We doubt not that numerous other violations of the spirit of the "order" will gradually come to light. It has been wrung from the commissioners by force; and we firmly believe that nothing, save the dread of parliamentary interference, induced them to make the concessions contained therein, to the repeated remonstrances of the medical profession, and of the advocates of the suffering poor.

As we remarked, however, on a former occasion, the commissioners have not attempted to settle the most important point in debate between them and the profession.

The poor-law medical officer must receive *adequate* remuneration for his services. This is acknowledged on all hands; not so much as an act of justice to the profession as an act of expediency. The system of grinding down the medical attendant of the poor to the level of a porter or a potboy has been tried and found inexpedient. Laying aside the injustice of the scheme, the advocates of economy confess that it will not work. Even the assistant commissioners affirm that some uniform principle of fair remuneration should be adopted throughout the country. The basis of the principle has been determined after the most careful calculations. The profession are not exorbitant in their demands. They are ready to undertake the medical care of the poor on the lowest terms, but they expect that their services shall be estimated according to some fair, fixed principle, not submitted to the capricious decisions of ignorant or interested individuals.

Instead of meeting this question fairly, the commissioners leave it untouched. They acknowledge that a system of payment per case should be adopted, but they proceed no further. Union medical officers are still to remain subject to the uncertainties and hardships connected with the ancient system. The profession will not, we trust, allow themselves to be deceived in this matter, or suffer their exertions to relax. Unless the commissioners or the legislature are prepared to enforce the adoption of some uniform principle, whereby adequate remuneration shall be ensured to the profession, the heart-burnings and contentions engendered by the poor-law will continue with unabated force.

A slight exertion, at the present moment, would ensure success.

Lord Granville Somerset has introduced into the House of Commons a new Lunatic Bill. The object of his lordship's bill is to secure a more complete superintendence than at present exists of county lunatic asylums, and to remedy the various abuses to which establishments of this kind are said to be liable.

At present the superintendence of county lunatic asylums is vested in the local magistracy. Lord Somerset proposes to abolish this jurisdiction, and commit the entire responsibility of supervision of county lunatic asylums to the present metropolitan commission.

A change of this nature would necessarily involve a change of the machinery by which the provisions of the bill are to be carried into execution. In the newspapers it was reported that the power of granting lunatic certificates was to be confined to members of the London College of Physicians. Such a provision would be not only unjust, but absurd; and we are glad to see, from the letters of Mr. Crosse and Dr. Dyke, which will be found in another part of the Journal, that Lord Granville Somerset never contemplated any impracticable enactment of the kind.

His bill, however, contains certain provisions and certain charges against the medical profession, which we cannot pass over in silence. Unless the latter be clearly refuted, and the former rejected, the medical profession will receive "a heavy blow and great discouragement," from which it will not easily recover. On introducing his bill to the House of Commons, Lord Granville Somerset declared that, as the law ordains that "there should be proper houses of a proper character licensed for the reception of insane persons," "the state and description of such houses should frequently be inquired into; and that the fact of their not admitting more than the number of patients for which they are licensed should be ascertained." "It was not less important that some responsible person should see that these houses are conducted on such principles as will insure the comfort and proper treatment of the unfortunate inmates. It was, above all, important that the same responsible person should take care to prevent individuals not in a state of insanity from being placed in confinement within those houses; and lastly, it was equally important that as soon as any of the unfortunate beings, rightly confined within those abodes of misery, exhibits a return to reason, and his recovery is accomplished, the same inspecting or visiting officer should take care to see him forthwith discharged and restored to his friends."

These are most important responsibilities. But on whom does the noble lord pretend to impose them? On two barristers!!! People of common sense will scarcely believe this to be the case; unfortunately it is too true. An able writer in the "Times" has exposed the absurdity of the plan in such forcible terms, that we are tempted to repeat his remarks:—

"Responsibilities like these presuppose in the individuals who assume or accept them a sound and extensive acquaintance with the principal laws of animal life in man, as well as with those which regulate the manifestations of his mind through the several organs and senses. They presuppose a knowledge of the effects produced upon the brain by certain diseases, emotions, passions, vices, evil practices connected with the human frame; a knowledge of the physical influence of particular localities, air, water, the aspect of houses, and the soil on which they stand, as well as the state of their ventilation, and the size of their apartments, upon lunatics susceptible of cure; a knowledge of the inevitable consequences of any particular regimen or diet or medical or ethical treatment on the mental malady of the dwellers in lunatic asylums—a knowledge, in fine, of the relative value of coercion or non-coercion of patients in reference to their ultimate recovery. With responsibilities so grave, and only to be safely and properly discharged by means of qualifications such as I have just enumerated, the new bill proposes to invest two barristers! And the bill has truly no other ostensible object whatever!!

And is it really come to this, that a mysterious affliction of the most noble of man's attributes, manifestly connected with the health of the body in by far the largest proportion of cases—an affliction which has engaged the profoundest attention of some of the most philosophical physicians in all ages, who, though successful in ameliorating it, and multiplying the number of its cures, have, nevertheless, been compelled to acknowledge the difficulties with which its treatment, moral as well as physical, is encompassed;—is it come to this, that two lawyers are, by the votes of the British senate, about to be declared capable and perfectly qualified to examine, visit, watch, and judge of the progress and finality, to decide as to the recovery of the miserable creatures on whom has fallen the most grievous malady that can afflict and humble humanity?

The next step of the legislature after this, of course, will be to authorise the same barristers to examine persons presumed to be insane, and to grant certificates for their confinement in lunatic asylums, as are now required from medical practitioners. For as, of the two stages, it is far more easy to determine the beginning than the termination of a case of insanity, and the new bill considers barristers as competent judges in the latter case, another bill will declare them equally competent to decide in the former. By-and-by another great improvement of the same kind will be proposed. Indeed, a hint to that effect was given by his lordship at the end of his speech. In all future cases of a commission of lunacy for determining the sanity or healthy condition of a patient before the chancery commissioner and a jury of enlightened men, medical practitioners will not be required to supply the necessary evidence, as hitherto, but barristers. As, however, barristers have never enjoyed, in the estimation of the public, either traditionally or through their writings, the peculiar reputation which such novel arrangements as Lord G. Somerset's bill presupposes in these individuals, what confidence, we would ask, will the friends and relatives of the miserable beings bereft of reason, the crazy, and the infirm of body and mind, confined in lunatic asylums feel in the report made by such inspectors? What comfort will they experience in knowing that their unfortunate kindred are under the supervision and watchfulness of barristers instead of physicians? What reliance will they place in any assurance which such inspectors may give them, that the physical as well as the moral well-being of the inmates of lunatic asylums is properly attended to? Finally, what faith will the world at large place in the evidence of such witnesses when it shall have determined the fate of patients supposed to be in a doubtful state of mental sanity?"

The reasons adduced by Lord Granville Somerset for thus withdrawing the inspection of county lunatic asylums from medical men, and entrusting the duty to two barristers, are both curious and novel.

"Medical men (with some brilliant exceptions) are not distinguished by habits of exactness, which legal men acquire by education." And again, "It would be difficult to get any medical gentlemen of first-rate ability to give up their practice, and dedicate the whole of their time to the duties of the situation."

It is really afflicting to find any member of the British legislature propound doctrines of this kind. The noble lord must surely know that, so far as remuneration for services goes, law and physic are not placed on the same level. The talented barrister in full practice makes three or four times more by his profession than the medical man who holds an equal rank; and it is infinitely easier to find a physician, of the highest education and best natural abilities, who is ready to devote the whole of his time to any particular duty, than to abstract a member of the bar from his lucrative pursuits in Westminster or Chancery-lane. Let the noble lord only try, and he will find that, instead of a difficulty in obtaining proper candidates, he will be embarrassed by a "legion."

As to the charge of want of *exactness* on the part of medical men, it is as absurd as it is unjust. No physician or surgeon could obtain or hold practice without the most scrupulous observance of exactness in everything connected with the duties of his profession. From the earliest date of his studies—during attendance on lectures and at hospitals—to his subsequent labours in life, and his professional intercourse with the world—the medical man is compelled to be exact; his very existence depends on habits of regularity and precision.

It is, therefore, passing strange on what data Lord Granville Somerset could have brought a charge of want of exactness against the medical profession, or what habits of exactness he can discover in the education of legal men, who virtually receive no special education whatever.

We propose, henceforward, to make the Retrospect of the Medical Sciences a new and prominent feature in the "Provincial Journal." This Journal circulates very widely amongst practitioners in all parts of the kingdom, many of whom have no ready access to other medical periodicals. It has, therefore, appeared to us necessary to make arrangements for regularly placing before our readers, in a condensed form, all that is really useful in the various periodical publications of this and foreign countries. About four pages of the Journal will be devoted regularly every week to this task. We thus entail on ourselves a great amount of labour and expense, but we shall thus attain our object of transmitting rapidly to every corner of the United Kingdom a practical summary of interesting facts in medical science, derived from every available source.

DOCTORS.

Jean Jacques tells us that, when his wife died, every farmer in the neighbourhood offered to console him by one of their daughters ; but that a few weeks afterwards his cow having shared the same fate, no one ever thought of replacing his loss by the offer of another; thereby proving the different value people set upon their cows and children. This seems absurd enough, but is it a bit more so than what is every day taking place in professional life ? How many parsons are there who wouldn't lend you five pounds, would willingly lend you their pulpit; and the commonest courtesy from an hospital surgeon is, to present his visitor with a knife, and entreat him to carve a patient. He has never seen the individual before; he doesn't know whether he be short-sighted, or nervous, or ignorant, or rash; all he thinks of is doing the honours of the institution; and although, like a hostess who sees the best dish at her table mangled by an unskilful carver, he suffers in secret, yet is she far too well-bred to evince her displeasure, but blandly smiles at her friend, and says "no matter, pray go on." This, doubtless, is highly conducive to science; and as medicine is declared to be a science of experiment, great results occasionally arise from the practice. Now that I am talking of doctors, what a strange set they are, and what a singular position they hold in society! Admitted to the fullest confidence of the world, yet by a strange perversion, while they are the depositories of secrets that hold together the whole fabric of society, their influence is neither fully recognised, nor their power acknowledged. The doctor is now what the monk once was, with this additional advantage, that from the nature of his studies and the research of his art, he reads more deeply in the human heart, and penetrates into its most inmost recesses. For him, life has little romance ; the grosser agency of the body reacting ever on the operations of the mind, destroys many a poetic day-dream and many a high-wrought illusion. To him alone does a man speak, "son dernier mot :" while to the lawyer the leanings of self-respect will make him always impart a favourable view of his case. To the physician he will be candid, and even more than candid—yes, these are the men who, watching the secret workings of human passion, can trace the progress of mankind in virtue and in vice; while ministering to the body, they are exploring the mind; and yet, scarcely is the hour of danger past, scarcely the shadow of fear dissipated, when they fall back to their humble position in life, bearing with them but little gratitude, and strange to say, no fear!

The world expects them to be learned, well-bred, kind, considerate, and attentive, patient to their querulousness, and enduring under their caprice; and, after all this, the humbug of homœopathy, the preposterous absurdity of the water cure, or the more reprehensible mischief of Mesmerism, will find more favour in their sight than the highest order of ability, accompanied by great natural advantages.

Every man—and still more, every woman—imagines himself to be a doctor. The taste for physic, like that for politics, is born with us, and nothing seems easier than to repair the injuries of the constitution, whether of the state or the individual. Who has not seen, over and over again, physicians of the first eminence put aside, that the nostrum of some ignorant pretender, or the suggestion of some twaddling old woman, should be, as it is termed, tried? No one is too stupid, no one too old, no one too ignorant, too obstinate, or too silly, not to be superior to Brodie and Chambers, Crampton and Marsh: and where science, with anxious eye and cautious hand, would scarcely venture to interfere, heroic ignorance would dash boldly forward and cut the Gordian difficulty by snapping the thread of life. How comes it that these old ladies, of either sex, never meddle with the law? Is the game beneath them, where the stake is only property, and not life? or is there less difficulty in the knowledge of an art whose principles rest on so many branches of science, than in a study founded on the basis of precedent? Would to heaven the "Ladies Bountiful" would take to the quarter sessions and the assizes, in lieu of the infirmaries and dispensaries, and make Blackstone their aide-de-camp, vice Buchan retired.—*Dublin University Magazine.*

ACADEMY OF MEDICINE, PARIS.

April 5.

PHTHISIS IN WARM CLIMATES.

Amongst 1,954 patients, treated during the years 1834 to 1839 by M. Rufz, at Martinique, 123 were affected with phthisis, and of these 53 died. According to M. Rufz's experience, phthisis is the most common chronic disease in the colony. Having tried the treatment with emetics, after the fashion of certain quacks in the colony, M. Rufz has obtained from them the best effects; he also remarks that Europeans

and Africans at Martinique appear to be less subject to phthisis than the creoles. The disease appears to be as frequent amongst adults as it is in Europe, and it has been remarked that nearly all the coloured women die of phthisis before forty years of age. M. Rufz acknowledges that his experience is not sufficiently great to determine the exact degree of influence exercised by the climate on phthisical patients arriving from Europe, but its beneficial effects do not appear sufficiently marked to warrant the institution of an hospital for consumptive patients.*

CALCULUS IN A CHILD.

M. Guersant, jun., presented a child, 10 years of age, on whom he had performed the operation of lithotomy. The patient had twice undergone the operation of lithotrity, at the ages of four and eight years, but symptoms of stone returned after each apparent cure. The child was at last admitted in the hospital, where he performed the bilateral operation, and removed ninety-one fragments of calculus; to effect this he was compelled to introduce the forceps thirty-two times, and the scoop five times; but although the operation was so tedious the child recovered perfectly.

FOREIGN BODY IN THE TRACHEA.

M. Guersant also showed a child who had been brought to the hospital fourteen days after having swallowed a haricot bean, which passed into the trachea; the symptoms of suffocation occurred at intervals only, and the child was submitted to medical treatment for a few days by some of M. Guersant's colleagues, who did not think that there was any foreign body in the air-passages. The operation was not performed until the eighteenth day after the accident. As soon as the trachea was opened the haricot appeared at the incision, and was immediately extracted. The child recovered perfectly.

* In reference to this subject, we may mention a fact which has recently been communicated to us by Dr. Gilgeous, of Demerara. During a period of seven months Dr. G. had the care of sixteen estates in Demerara, consisting of a population of 300 negroes, *constantly* sick, but he did not meet with a *single* case of phthisis amongst them.

MANCHESTER EYE HOSPITAL.

[*Practice of Mr. Walker.*]

INJURY FROM LIME.

John Kenyon, aged 22, admitted an out-patient, November 12, 1841. He stated that, about three weeks previously, while following his occupation of a plasterer, a quantity of lime or mortar was propelled against both eyes, and produced very severe suffering and impairment of vision, which have remained to this time.

On examination, the conjunctiva of both eyes was found to be extremely vascular; a considerable portion of each cornea was also observed to be very opaque, more particularly towards the inferior and inner margins, and in the left eye there was a slight adhesion between the conjunctiva of the inferior lid and that of the globe. Much irritation and a considerable flow of tears were occasioned by exposure of the eyes to light, and vision was very obscure.

He had applied to a medical man shortly after the accident, who had resorted to the ordinary antiphlogistic remedies, including the application of a large number of leeches, which had not only drained his system of a large quantity of blood, but had also had the effect of emptying his purse. He, therefore, applied to the hospital in the expectation that leeches would be found him gratuitously, as his medical man had informed him that more bleeding was indispensable to the safety of his eyes.

Entertaining a somewhat different view of the case, Mr. Walker simply drew a pencil of nitrate of silver lightly across the conjunctival surface of the inferior lid of both eyes. He was also ordered to use a solution of sulphate of zinc, as a lotion, frequently during the day, and to apply a small portion of red precipitate ointment to the tarsal margins and within the inner canthus at bed time. An aperient powder was also supplied to him, to take occasionally.

15. The vascularity is much diminished in both eyes; he can bear exposure to light with less inconvenience, and altogether the improvement is very considerable. The pencil of nitrate of silver was again applied, and the other remedies ordered to be continued.

The improvement from this time was very rapid. The sulphate of copper was early substituted for the nitrate of silver; the vascularity gradually diminished; there is still, however, considerable opacity of the cornea of both eyes, which will doubtless be permanent, but as the pupil is not obscured in either, vision has been completely restored.

WOUND OF THE CORNEA.

M. A. Wilkinson, aged 20, admitted an out-patient November 30, 1841. About ten days before admission she received an injury from a pin, which had accidentally come in contact with her right eye. On examination, the organ was found to be in a state of great irritation, the conjunctiva and sclerotica both highly vascular, more especially the former, and the central portion of the cornea appeared to be slightly abraded of its conjunctival covering, and somewhat opaque. The irritation did not appear to have extended to the deeper seated textures. She complained of intense pain in the eye and whole orbital region, great intolerance of light, profuse lacrymation, and very imperfect sight. She had been under the care of a surgeon, who had bled her freely from the arm, applied the cupping apparatus to the temple, and a great number of leeches around the eye, and administered strong purgatives and the like, without affording her the smallest amount of relief. She was a spare and rather delicate girl, and appeared much reduced by the treatment employed.

She was ordered to take half a grain of opium and two grains of calomel every six hours, and to apply the extract of belladonna constantly around the eye. A purgative to be taken occasionally.

Dec. 3. The pain, she states, is somewhat abated, but still very severe, and the vascularity of the eye is but slightly diminished. As the wounded part of the cornea appeared still to have an irregular and abraded surface, it was determined to treat the case simply as one of injury of that texture. The eyelids were accordingly closed with strips of court-plaster, and she was directed to do nothing more until her next

visit, except merely to take an aperient every other morning.

7. The relief experienced she states to have been very great. The pain is now much mitigated, but there is still a considerable amount of vascularity of the external tunics. The cornea has lost much of its irregular and abraded appearance, and is evidently in a healing condition.

28. The plaster treatment has been continued to this time. There is now some chronic inflammation of the conjunctiva, and the centre of the cornea is slightly opaque. Vision is still rather impaired, but there is very little uneasiness about the eye. The sulphate of copper, in substance, was applied to the inner surface of the lower lid, and a solution of the same salt was directed to be applied to the eye two or three times daily.

Since the above report she has continued to attend occasionally, and the same treatment has been persevered with, the opacity of the cornea diminishing, and vision being now almost as perfect as before the accident.

BRITISH MEDICAL ASSOCIATION.

A half-yearly meeting of this association was held at Exeter-hall, on Tuesday evening, the 29th inst.

Dr. Webster, having taken the chair, gave a short sketch of what had been done during the last six months. The first point to which he referred was medical reform. A deputation had waited on Sir James Graham with the view of ascertaining whether or not government intended to bring forward any measure of medical reform. Sir James Graham admitted that there was a pressing necessity for something being done,but in consequence of the great parliamentary questions which were likely to occupy the attention of the government, he doubted whether they would be able to bring forward any measure during the present session. Of the government measure, however, he (Dr. W.) had not been able to obtain any information. He had written to Sir James Graham for a copy of his bill, but was told that it was not yet in a sufficient state of forwardness. Dr. Webster next referred to the poor-law question, and the recent medical regulations of the commissioners. Some of these were manifest improvements on the old plan, but he could not give his approbation to the qualification clause, by which appointments were confined, or nearly so, to the members of the College of Surgeons in London.

J. Eales, Esq., then read the breviate of the bill, drawn up by the council of the association.

Dr. Marshall Hall moved,—

"That the bill prepared by the council of this association (of which the breviate has now been read) be cordially adopted, as containing those great principles of medical reform for obtaining which the association was founded, viz :—

"1. Incorporation of the whole profession into one body or faculty, but without prejudice to existing medical institutions.

"2. Uniform and extensive qualification for all future candidates to practise the healing art.

"3. The representative plan of government, by one council in each division of the kingdom.

"4. Equal rights and privileges to all the members of the faculty.

"5. Protection to the public and the profession against illegal practice.

"That any measure of medical reform which does not contain these principles will be most unsatisfactory to the association, and, they believe, to the great majority of the profession."

Dr. Grant, in seconding the resolution, said—So far as I have had the slightest glimpse into the changes intended to be introduced into the medical institutions of the country, the great fundamental principle seems to be entirely overlooked. Any measure of reform which does not embrace the entire British empire, is a most contemptible skulking from the difficulties of the question, and tends to perpetuate the ridicule and contempt which has been justly cast upon us by the civilised nations of the world. (Cheers.) The proposed measure of reform is merely designed to patch up the state of the institutions in the metropolis, and thereby pacify the most clamorous part of the profession. I consider this as most imbecile legislation, and I trust that the profession will combine and show that they are sensible of the degraded position in which the corporations have so long held them. (Cheers.)

R. D. Grainger, Esq., moved,—

"That while the members of this association rejoice that their efforts to ameliorate the system of medical relief have been so far crowned with success, that the poor-law commissioners have at length adopted many of the views of this and other associations in their order just issued, they consider it necessary jealously to observe whether these are carried out by the boards of guardians, and to continue to press for the adoption of other equally important points."

R. Davidson, Esq., moved,—

"That this association must protest against the qualification required by the poor-law commissioners for union medical officers, being derived from English sources, to the exclusive injury and degradation of their brethren, members of the Scottish and Irish colleges and universities."

Dr. Granville, in an able speech, exposed the absurdities of Lord Somerset's "County Lunatic Asylum Bill" and proposed the following resolution :—

"Resolved, that this society, deeply impressed, from long experience and repeated observation, with the conviction that no proper and effectual supervision of the private lunatic asylums in England and Wales, those of the metropolitan district included, can be secured, except by the agency of medical men of mature judgment, versed in the knowledge of the physiological laws which regulate the connection between mind and body, and their reciprocal influence when under disease ;—has seen with regret, not less than with surprise, the introduction into the House of Commons of a Bill for better securing an effectual inspection of the private lunatic houses licensed by the magistrates in quarter-sessions, through England and Wales; in which Bill it is declared that medical men are not fitted for the office of visiting commissioners, because of their want of habits of exactness ; and it is proposed to commit the important duty of seeing that lunatic

asylums are properly conducted, and the afflicted inmates properly treated and taken care of, morally as well as physically, to two barristers.

"Resolved, that such a declaration and such an appointment are a reflection on the character and abilities of medical men in general, totally unmerited; and that the appointment of two barristers in particular, for the offices contemplated by the bill, is one to be deprecated and protested against, as inconsistent with justice, science, and experience.

"Resolved, that a petition, embodying the principles and expressions of the preceding resolution, be forthwith prepared and presented to the House of Commons, praying not to pass the said bill.

"Resolved, that Mr. Wakley be requested to present the same."

C. Brady, Esq., moved,—

"That this association considering the income-tax, as proposed by government, to be calculated to press severely on professional men, more particularly on those engaged in medical practice, a petition be presented, praying that Parliament will so modify the measure as to render it less oppressive on men whose incomes are entirely dependant on their individual labours."

He considered the medical man to be very differently situated from those who derived their income from landed or funded property. The latter could transmit their property unimpaired to their children, but the medical man was entirely dependant on his exertions. Let him experience six months' illness, and his practice, and with it his means of support, were gone. (Hear.)

Septimus Rees, Esq, having seconded the resolution, it was put and agreed to.

MEDICAL REFORM.

The following letter has been addressed to Dr. Hastings by an influential member of the Provincial Association:—

Norwich, March 31, 1842.

In replying to the printed letter forwarded on the 11th instant for my inspection, and addressed to the Right Hon. Sir James Graham, I beg to express my entire concurrence in the terms thereof, as regards the existing medical corporations of the United Kingdom, the necessity of uniformity of education, equal right to practise in any part of her Majesty's dominions, and the adoption of the representative system *to a limited extent* in the election of all governing medical bodies; and I shall endeavour, in due time, to advocate those sentiments with such members of Parliament in this district, as I may be able to gain access to.

To the above declaration I wish to add a few remarks explanatory of my sentiments upon some leading points, and which I have embraced after mature reflection and considerable experience.

I consider that the existing distinctions of physician, surgeon, and general practitioner, which have arisen out of the wants of society, must be maintained, and that the one faculty system is inapplicable to this country, impracticable, and suited only to a republican government. It appears to me that the denomination of "apothecary" is become obsolete, and no longer attaches to any part of the medical profession; the prescribing druggist approaches nearest to what was formerly meant by "apothecary," which is no longer applied to any regular and respectable member of the medical profession, except in contempt and when he is absent. Nothing, in my humble opinion, can tend more powerfully to maintain the general practitioner in his respectable position, than his being legally authorised to charge for attendance; the degradation of his calling has continued not from his supplying medicine to patients under his care, but his seeking remuneration by the quantity of medicines supplied. Is there anything more reasonable in the abstract, than that the prescriber of medicine should supply, where he sees fit, the medicine required by his patient? Every practical physician and every pure surgeon does this more or less on particular occasions; and the security and convenience of the public occasionally demand that it should be so.

The increased necessity for uniformity of education and of license, in the three divisions of the empire, may be urged on account of the increased rapidity and facility of intercommunication by the powers of steam-travelling; distance, as estimated by time, is more than half annihilated; the most remote parts of the empire are approximated to the one great metropolis; the greatest barrier between the three divisions of the empire is removed; the distinctions connected with our political history become more obvious and obnoxious, and will soon become quite inadmissible; hence any attempt to legislate for England, exclusive of Scotland and Ireland, must be regarded as defective, and suited only to aid the profession of one part of the kingdom to the detriment of the rest. The publication of an universal pharmacopœia at stated periods, under the direction of the best men that can be selected from the three portions of the empire, can scarcely be lost sight of in any parliamentary proceeding.

I have no desire to see privileged corporate bodies propped up at the sacrifice of useful general principles in legislation. I do not believe that any enactment will be very effectual for the public good, or the better organisation of the medical profession, unless registration be adopted through the means of an annual license. If each of our numerous corporate bodies carry the registration of its members to the greatest possible degree of accuracy, I think they must fail collectively to afford the evidence annually required as to identity of person, change of residence, immigration, commencing or retiring practitioners, decease, &c.

I would allow no general practitioner to retail drugs, or be otherwise concerned with them than to supply his own patients. I would offer facilities for men of experience and acknowledged reputation becoming physicians; and the pure surgeon, after a prescribed course of extended education and examination, should be admissible to the title of doctor in surgery, as happens in the United States of America, and in every European country save our own.

In respect to *druggists*, I hold the opinion (so generally entertained, I believe, by all who have had sufficient opportunities and considered the subject), that

no interference can be made with *their* prescribing over the counter; but I think there should be full power to prevent their visiting patients, or assuming and using the title of physician, surgeon, apothecary, or general practitioner. I do not believe that excluding druggists from all medical appointments, and from all legal claim to remuneration, will give any check to their injurious pursuits—but, on the contrary, without penal restriction, the druggist will become more and more the apothecary, and will associate and connect himself with the prescriber of medicines, whether physician or surgeon, in a way detrimental to the public, just in proportion as the general practitioner seeks to be promoted.

The medical care of the poor seems likely to be placed on so improved a footing, that I do not desire to dilate upon this subject, and have no room.

The most difficult of all subjects is, perhaps, quackery, whether professional or extra-professional; the former is by far the worse, but can only be restrained by licensing bodies having the power, under extreme circumstances, of withdrawing their diploma and placing the delinquent beyond the pale of the profession. For quacks of the latter class, which the public have had in all ages, and will always have, I do not feel competent to suggest any further restriction than precluding the quack from assuming the title of physician, surgeon, general practitioner, apothecary, &c., or using any advertisement or inscription calculated to delude the public into a belief that he belongs to the medical profession.

A Member of the Provincial Association.

To Dr. Hastings, Secretary to the
Prov. Med. and Surg. Association.

CERTIFICATES OF INSANITY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—Having observed in the last number of your periodical, from the pen of a correspondent, that Lord Granville Somerset, on presenting the proposed new "Bill for regulating Lunatic Asylums" to the House of Commons, stated his intention to take away from the surgeon and apothecary the power to sign certificates of insanity, and confer such power only on "members of the College of Physicians," I immediately addressed the noble lord on the subject, and am glad to be able to quote his reply to the effect that "no intention was ever entertained to alter the descriptions of medical practitioners by whom certificates of insanity may now be signed." It is sufficiently clear that every practitioner legally authorised to exercise his profession ought to have the power referred to, and the ridiculousness of the idea of restricting it to members of the London College of Physicians throughout England cannot be placed in a more prominent light than by the fact which my own knowledge enables me to state publicly, that amongst a population of above 700,000 inhabitants in this eastern district there are not now practising half a dozen members of the College of Physicians. In the city where I reside there is at this day, amongst a population of above 70,000, only one licentiate of the College of Physicians resident and practising, and he two years ago was a general practitioner, having been recently admitted an extra licentiate in consequence of the new and more liberal regulations of the college; to this promotion he proves himself, I believe, every way entitled, save that he embraces opportunities both in private and in public to cast reflections on the line of practice he has so recently quitted.

I remain, Gentlemen,
Your obedient servant,
J. G. Crosse.

Norwich, April 6, 1842.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I herewith forward to you a copy of a letter I addressed to Lord Granville Somerset, and his lordship's reply, respecting the medical certificates of admission to lunatic asylums, the substance of which, if inserted in your widely-circulated Journal, will correct much misapprehension.

Your obedient servant,
——— G. W. Dyke.

"My Lord,—Many communications have doubtless been addressed to your lordship on the subject of the bill which you have recently introduced to amend the law relating to lunatic asylums, more especially to the clauses by which (if the newspapers are correct) it is proposed that in future the medical certificates of admission shall be signed by members of the College of Physicians of London *only*. I beg leave to inform your lordship that in the county of Wilts there are six asylums for the insane, four of which I believe contain upwards of one hundred patients, and that there is not, to the best of my knowledge, *one* member of the College of Physicians of London practising in the county. Your lordship can, therefore, readily conceive the trouble and expense to which those parties will be put who are desirous of sending patients to those institutions, provided this part of the bill is not altered in committee.

* * * * *

I have the honour to be,
Your Lordship's obedient humble servant,
G. W. Dyke, M.D.

Corsham, Wilts, April 6, 1842."

"Clarges-street, April 7, 1842.

Sir,—The bill which I have introduced into Parliament contains no clause to alter the existing law as to certificates of insane patients. I gave the subject much consideration, and I did not think upon the whole that I could make an alteration without producing greater evils than benefits.

I am, Sir, yours, &c.,
G. C. H. Somerset.

Dr. Dyke, M.D."

GLOUCESTERSHIRE LENT ASSIZES.

PRESCRIBING DRUGGISTS.

The following important trial will, we trust, set at rest the hitherto disputed question between chemists

and medical practitioners. We have abridged the account from the *Cheltenham Examiner* of April 6:—

THE MASTERS AND WARDENS OF THE SOCIETY OF APOTHECARIES *v.* ROBERTS.

This was an action to recover penalties alleged to have been incurred by the defendant by practising as an apothecary without the certificate of qualification required by the 55th George III., c. 194.

Mr. Maclean having opened the pleadings,

Mr. Serjeant Talfourd addressed the jury. In consequence of the great importance which this class of medical practitioners had assumed, it became extremely necessary to guard the health of the public against the intrusion of persons into that branch of the profession who should be unfitted to perform the duties attaching to it, and accordingly in the year 1815 an Act of Parliament was passed, which reposed in the Society of Apothecaries, an ancient body chartered by King James I., and its sworn examiners, the duty of superintending the education, and testing the qualification of those who should thereafter engage in the practice of an apothecary. I cannot do better than read you the terms of the Act of Parliament itself. It recites, "That much mischief and inconvenience has arisen from great numbers of persons in many parts of England and Wales exercising the functions of an apothecary who are wholly ignorant and utterly incompetent to the exercise of such functions, whereby the health and lives of the community are greatly endangered, and it is become necessary that provision should be made for remedying such evils." Then that mischief being recited, the Act of Parliament enacts, "That the said master, wardens, and Society of Apothecaries, and their successors shall be, and they are hereby appointed and constituted, directed, and empowered, for ever to superintend the execution of the provisions of this Act, and to enforce and carry the several regulations and provisions thereof in relation to the several persons practising the art and mystery or profession of an apothecary throughout England and Wales, and all other purposes of this Act into full execution." Another clause prohibits any persons from practising as apothecaries, unless they shall have obtained a certificate from the Society of Apothecaries, which of course is preceded by an examination by persons appointed by the Society, and enacts that persons practising without such certificate, shall be liable to a penalty of £20 for each offence, and empowers the Society of Apothecaries to sue for that penalty. It does not permit (as is often the case) any individual who may think fit to take upon himself the enforcement of the law, either for his own personal and individual benefit, or from any other feeling, but reposes in the Society alone the power of instituting proceedings like that which has brought the defendant, Mr. Roberts, before you to-day. Mr. Charles Roberts carries on the business of a chemist and druggist, in Winchcomb-street, in the town of Cheltenham, and in the month of January, 1841, it was brought to the notice of the society, that he had taken upon himself to act as a medical practitioner, that he had attended patients in various illnesses, and had not only provided drugs, but had given his advice, and had, in fact, performed all those functions, which in modern times have belonged to an apothecary. A letter was accordingly addressed by the society to Mr. Roberts in that month, informing him they had received such information, and desiring him to desist for the future, or that they should put the law in force against him. They heard nothing from him, however; but in December last (many months having elapsed), certain proceedings took place in Cheltenham, which of necessity brought it to the knowledge of the Society, that Mr. Roberts had been acting, and acting somewhat extensively too, in prescribing for, and in administering medicines to the poorer class of the community; and when it was brought to the knowledge of the Society in such a manner they felt bound (their previous warning having been disregarded) to institute these proceedings. They found several cases, when they came to inquire further, in which he had given his advice, and attended as a medical man, and acted, in fact, precisely as apothecaries act, with this slight difference, that his charge had been made nominally for his medicines, only a difference which does not exist in the case of many apothecaries, it having been, indeed, till lately thought that an apothecary had no right to make a separate charge for his attendance, a very unfortunate delusion, which has now been happily removed. Under these circumstances the present action has been brought against Mr. Roberts. Perhaps he may have proceeded upon this ground—he is a chemist and druggist, a trade which borders on the margin of the medical profession, but for the purpose of entering into which there is no previous examination, education, or even necessary skill; any person who chooses to open a shop in any town, to put "chemist and druggist" over his door, and to get some large glass bottles filled with prettily coloured liquor, may hold himself out to the world and act as a chemist and druggist; and most useless would this Act of Parliament be if a person who carried on this extremely respectable trade, even if he carried it on *bonâ fide*, had a right to break through the provision of the law and to practice as an apothecary. Mr. Roberts has been probably under an impression that he had a right to act in that manner, and that impression he may have derived in part from the circumstance of a trial which took place before a learned judge, who was once a great ornament to the bar of this circuit (Mr. Justice Maule), in which the jury acted under the direction of that learned judge, who thought that an exception contained in this Act of Parliament in favour of the trade of chemists and druggists, allowing them to carry on that trade as before the Act, might entitle a chemist and druggist to give advice and to administer medicine, but that was afterwards set right by the Court of Queen's Bench, and it is now well known and established that the carrying on the trade of a chemist and druggist gives no right to an uneducated and unauthorised person to act as an apothecary. I am willing to give Mr. Roberts credit of having been confirmed in the course he was taking by an apprehension of that kind. I believe that my friend, Mr. Alexander, who appears for Mr. Roberts, is ready, on his behalf, to express his regret for having violated the law, to admit that he has so done, and that there is no foundation at all, when the matter is rightly investigated and understood, for the claim of a chemist and druggist to act as an apothecary without a proper certificate from the

Society. If my learned friend is now instructed to express that feeling on the part of the defendant, then I, on the part of the Society of Apothecaries, am content to accept your verdict for one penalty, and to abstain from enforcing that judgment or the costs upon it, unless the Society shall satisfy themselves that he has again infringed the law, in which case the judgment will be put in force against him. The Society will not exercise the power they thus reserve to themselves without the most candid and full examination. I firmly hope and believe that there will never be any occasion for such an examination, but that Mr. Roberts, convinced of his error and acknowledging it now through his counsel, will cease to act as he has done, and then the object will be accomplished which induced the Society to bring this case before you.

Mr. W. Alexander for the defendant then said: I am anxious to express, both on the part of Mr. Roberts and myself, my full conviction of the pure motives which have actuated the plaintiffs in this proceeding. I believe they have been actuated only by a sense of their public duty. Mr. Roberts desires me to express on his behalf his regret for having broken the law, as he is now aware he has done, by violating the provisions of the Apothecaries' Act. The mistake into which he has inadvertently fallen arose from the very general way in which a decision in the case of the Apothecaries' Company *v.* Greenough was transmitted through the country in various medical works, and the length of time which elapsed before the verdict in that case was set right by the Court of Queen's Bench. He regrets that he broke the law, and he is not at all unwilling to submit to the terms which have been suggested, and to consent to a verdict passing against him for one penalty, and he engages *bonâ fide* to abstain from the practice of an apothecary in future.

Mr. Justice Patteson: I am glad the case has taken this course, for I can very easily see the effect that that case to which you refer must have had between the time of the verdict and the time of its being set right by the Court of Queen's Bench. The doubt arose from the word "dispense," which is used in the 28th section. That is the clause authorising chemists to dispense medicine, and it was thought that that meant that they might give advice, but the court determined that it gave no such power.

The verdict was then taken for one penalty and costs, and the jury were discharged as to the other counts.

Retrospect of the Medical Sciences.

THE CAUSES OF METALLIC TINKLING.

Laennec, whose talent for observation exceeded his powers of explanation, gave a very vague theory of the cause of metallic tinkling. Dance attributed it to the breaking of the bubbles of air on the surface of the liquid in the pleural cavity. M. Beau adopted this explanation, and sought to render it complete by adding the cases in which the fistula, not opening below the level of the liquid, traverses a collection of purulent matter; and finally, M. Raciborski explains metallic tinkling by the vibrations of the effused fluid, caused by the motions of respiration, the cough, and the voice. M. de Castelnau, availing himself of the arguments used by Messrs. Barthe and Rogers, in their Manual of Auscultation, has easily demonstrated the insufficiency of each of these theories taken separately. In fact, the theory of Messrs. Dance and Beau falls at once before the well-ascertained fact, that the tinkling has been observed in cases where the fistula opened above the level of the liquid; on the other hand, besides the difficulty of understanding the theory of Raciborski, if it were founded in truth, the metallic tinkling, as de Castelnau observes, ought to be present also in pneumo-hydro-thorax without communication, which does not occur, in at least the great majority of cases. M. de Castelnau considers the metallic tinkling to be nothing else than a mucous or cavernous râle resounding in a spacious cavity, by means of a communication established between it and the bronchia—that is to say, an amphoric râle. The presence of a liquid, he adds, is not necessary for its appearance. He supports his theory by experiments and clinical observations.

An elastic gum catheter, containing a few drops of water, or mucilage, to moisten its parietes, was affixed to a syringe, the piston of which was set in action; a species of râle, closely resembling the mucous râle, was then heard. The end of the catheter was next introduced into a vessel of a certain size—a bottle or pitcher, for example—and the râle was immediately changed into a genuine metallic tinkling, which was heard equally well when the bottle was empty, as when it contained fluid. This experiment was repeated on the dead body, and the same results were obtained. The clinical facts are four in number, and three of these, at least, prove that metallic tinkling can exist without the air being obliged to traverse a liquid in the pleural cavity.—*Examinateur Médical.*

PHTHISIS.

Of ninety-eight patients who have been, or are, under my care since the beginning of October, no fewer than twenty-eight (which is one in three and a half) have presented signs of tubercles in the lungs. Of this number, thirteen were cases either of latent phthisis, or of pulmonary tubercles disguised by other diseases, and which, but for their physical signs, we should not pronounce (perhaps not even suspect) to be tuberculous at all. I am convinced, from extensive observations and much reflection on this subject, that tuberculous disease of the lungs, in some degree or form or another, prevails among the more seriously sick in London, and in other large towns, in as great proportion as among our own patients (above stated). So far as our post-mortem examinations have given the opportunity, you have seen verified the statement which you have often heard me make—that of those in large towns, who die of various diseases or accidents, above the age of thirty, more than half exhibit in the lungs more or less of tuberculous disease, or of the traces which it leaves behind. It is thus only we can learn the real amount and importance that tuberculous disease bears in the scale of maladies, by regarding it not only in its more acknowledged forms, and attended by its common symptoms, but by aid of careful physical diagnosis, or of the still more minute search of the scalpel, tracing it in all its

degrees and combinations, as a secondary lesion and as a primary affection, as an index of the state of the constitution, as well as in the more decided form of an extensive organic disease.—*Dr. C. J. B. Williams, in London Medical Gazette.*

HYERES.

Dr. Barthe states, that a residence at the beautiful and healthy village of Hyères is of service in cases of chronic pulmonary catarrh, asthma, emphysema of the lungs, phthisis, and chronic affections of the larynx. The diseases of the circulatory system may be advantageously influenced secondarily through the medium of the respiratory apparatus. Rheumatic subjects will also derive benefit from a warm atmosphere so little subject to thermometrical and hygrometrical changes. Affections of the mucous membrane and of the nervous system derive but little relief from the climate of Hyères, which is far more useful in cases of general debility and in scrofula.

Scarcely five and twenty years since, immense marshes covered the southern part of the plain, and gave rise to intermittent fevers by their emanations; but in 1820, M. Louis Aurran undertook to dry up these marshes, by turning the course of the river Roubaud, in which he succeeded with the aid of M. de Ivernois, of Geneva. Intermittents are now almost unknown.—*Archives Générales de Médecine.*

HYDROCYANATE OF IRON IN EPILEPSY.

Dr. Jansion, of la Brugière, recommends the internal administration of the hydrocyanate of iron in epilepsy, which he regards almost as a specific in that disease, when not dependant on organic changes. When given periodically, it suspends the attack as long as it is used, and this suspension is often followed, he says, by a perfect cure. His *methodus medendi* is, to say the least of it, somewhat singular. The employment of the hydrocyanate must be persisted in for five or six years after the apparent disappearance of the malady, not continuously, but for three or four days at a time every three or six months, about the time of the decline of the moon, or at the end of her first quarter; for the doctor places great reliance on the lunar influence. The dose is a centigramme and a half at first, morning and evening, increasing it gradually by a centigramme every three or four days, until it amounts to ten centigrammes.—*Journal des Connaissances Médico-Chirurgicales.*

DIABETES MELLITUS.

M. Bravais, of Annonay, has detailed a case of this intractable disease, occurring in an aged man, which was cured by a strict attention to diet. He was restricted to animal food, consisting of beef, mutton, poultry, milk, eggs, cheese, &c.; bread, saccharine and feculent food being entirely proscribed. The treatment continued four months and a half. The patient had had an apoplectic attack eight years previously.—*Ibid.*

GLAUCOMA.

M. Sichel has never found any other change in the vitreous humour than the presence of small circumscribed spots, caused by fibro-albuminous effusion. Dissection has always shown evident signs of disease of the choroid, such as vascular injection, thinning, or partial discolouration. It sometimes assumes a violet colour, and is occasionally, in parts, perfectly colourless. The retina, on the other hand, is often thickened, and of a yellowish colour at places. Glaucoma may be complicated with cataract; in that case, the greater the opacity of the crystalline lens, the less apparent is the greenish tint in the interior of the eye, and it loses the appearance of depth and concavity. From all these causes, M. Sichel concludes the choroid membrane to be the real seat of glaucoma.—*Examinateur Médical.*

STATISTICS OF OPERATIONS FOR HERNIA.

From the 1st of January, 1836, to the 1st of January, 1842, 220 operations for strangulated hernia have been performed in the hospitals of Paris, of which, 133 proved fatal; in 1836, of 37 operations, 24 were attended with fatal consequences; in 1837, of 36, 24 died; in 1838, 33 operated on, 20 died; in 1839, 36 operations, 20 deaths; in 1840, 37 operations, 21 deaths; in 1841, 41 operations, 24 deaths. Of the 220, 100 were men, 120 women.—*M. Malgaigne.—Ibid.*

THE HYMEN.

M. Velpeau states in his lectures on the diseases of the uterus, that the tubercles which result from the rupture of the hymen, instead of becoming atrophied, as is generally the case, occasionally enlarge and are the seat of much irritation, so as to be mistaken for polypi or the effect of venereal disease. Astringent lotions, or excision, will effect a speedy and perfect cure.—*Ibid.*

CANCER OF THE OMENTUM.

A woman, labouring under dropsy of both ovaries, was also affected with scirrhous engorgement of the neck of the uterus; besides which, a tumour could be felt at the back of the vagina, which appeared to be seated in the posterior paries of the canal, for it was found on examination, that it was not connected with the rectum. The autopsy showed, besides the ovarian dropsy, cancerous degeneration of the omentum, of the kind called gelatiniform, a portion of which, two inches broad and one thick, had separated and fallen down into the vagino-rectal cul-de-sac of the peritoneum, where it had formed the hard tumour which had been discovered during life.—*Ibid.*

DEAFNESS.

M. Petrequin, of Gand, classifies the varieties of deafness, dependant on affections of the Eustachian tube and tympanum, as follows:—First, deafness from phlogosis of the tympanum and Eustachian tube. Secondly, traumatic deafness. This species of deafness may be the result of cerebral concussion, or of primary or secondary hæmorrhage. The bleeding occasionally shows itself externally, either by the nose or mouth, in which case, the Eustachian tube may be one of its sources, or else from the external ear, the blood coming from the tympanum through a laceration of the membrane, or directly from the lining membrane of the auditory canal. Most frequently the blood remains in the tympanum, and may produce most serious symptoms. In cases of traumatic deafness, with or without apparent hæmorrhage, M. Petrequin has had recourse very successfully to the repeated application of a small number of leeches behind

the ear, and to cutaneous or intestinal revulsives. Thirdly, deafness from obstruction of the meatus auditorius by an accumulation of cerumen, polypi, foreign bodies, accidental membranes, &c. Fourthly, deafness from congestion. This variety may be caused solely by congestion of the nerves of audition, or by a more extensive cerebral congestion. The treatment should be the same as for simple cerebral congestion. Fifthly, divers deafnesses. This last-named species is destined to receive all those cases which cannot be clearly traced to any of the preceding, M. Petrequin giving, as an example, deafness co-existing with an abscess in the mastoid cells.—*Annales de la Société de Médécine de Gand.*

DYSMENORRHŒA.

As a general rule, in women of a plethoric habit of body, repeated venesections will occasionally bring on the menstrual secretion; nervous women require sedatives and anti-spasmodics; the weak and chlorotic stimulants and tonics, especially chalybeates. When dysmenorrhœa is caused by any disease, that disease must be removed before the menstrual secretion can be reproduced.—*Examinateur Médical.*

ENORMOUSLY DISTENDED GALL-BLADDER.

Dr. Babington has placed a very interesting case upon record, under the above title, the post-mortem examination demonstrating a most extraordinary amount of disease, which could not have been expected from the symptoms presented during life. The subject was a plumber and glazier, about 27 years of age, who had always enjoyed good health until about thirteen months previous to his admission into the hospital, with the exception of a fistula, which he had had about ten years before. About ten months before he came under Dr. Babington's hands, he first noticed what he called a small ball beneath the margin of the ribs on the right side, which he says was movable, and gave him occasionally great pain. The tumour gradually increased in size from that date, and he rapidly lost flesh and strength. On admission, the right hypochondriac and parts of the right lumbar and umbilical regions, and of the scrobiculus cordis were occupied by a large rounded tumour, the surface of which was quite smooth. It was moderately firm, and gave a very perceptible sense of fluctuation on percussion. The body was much emaciated; face pale, wax-like, and exsanguine; the action of the heart and respiration regular. He was admitted on the 19th of January, and lingered till the 11th of the following month.

The post-mortem examination showed that the tumour consisted of a large cyst, which adhered feebly, but extensively, to the anterior walls of the abdomen, and was in great part surrounded by hepatic substance. "The cyst was more than half full of reddish, ropy, opaque secretion, about two large washhand basinfuls, with a copious sediment, as of a very puriform, semi-solid mucus, more or less in detached masses, variously tinted. The walls of the cyst were nearly a quarter of an inch thick, consisting of indurated liver and rather œdematous tissues, somewhat lacerable in a few points. One part, nearly in front of the right kidney, appeared to have given way before the inspection; and others gave way in the progress of separating adhesions, which were of different degrees of firmness, but partial. The interior of the cyst presented many slight septa, in the form of flat folds, or sharp crescentic ridges, some four or five inches long, and an inch in height. The lining had somewhat the appearance of a soft rough cuticle. Parts of the wall involving the liver seemed softened, and tending to suppuration. The fundus of the gall-bladder, expanded, thick, œdematous, and still reticular, formed the anterior parietes, and was about equal in superficial extent to a pint basin; it was separated in part from the rest of the cyst by some of the crescentic septa above described.—*Guy's Hospital Reports.*

THE EXPLORING TROCAR AND CANULA.

Dr. Babington, in a note to the case of enormously distended gall bladder, noticed above, says, "I may here, by the way, direct the attention of the profession to the great utility of this little exploring instrument. It consists of a trocar and canula, both together not thicker than a stout darning needle. This may be inserted into any part without danger; and although the tube is too small in its bore to allow any substance, except of the most liquid kind, to pass through it, yet it possesses the great advantage over Dr. Davies' grooved needle, that it allows of the introduction of a long fine probe, so that the existence and extent of a cavity beyond the canula can be ascertained with perfect safety and absolute certainty.—*Ibid.*

PRACTICE OF MEDICINE IN TEXAS.

By an act of the 14th of December, 1837, the appointment of a board of medical censors was authorised for regulating the practice of the profession in the republic. The board was empowered to examine applicants, and to grant licenses upon satisfactory evidence of qualification. Single members of the board might grant temporary licenses at a charge of twenty dollars each, until a meeting of the body afford opportunity for examination. All monies obtained for licenses to be appropriated as the board deem proper. —*Kennedy's Texas.*

RATE OF MEDICAL FEES IN TEXAS.

The following scale of charges has been adopted by the Medical and Surgical Society of Houston:—

The charge for the first visit to be five dollars; for every succeeding one, three; the fees being doubled after nine, p.m. For extra-urban visits, one dollar extra per mile in the day, and two at night. For advice and prescriptions at home, five dollars; for consultations, twenty; and for cases of such importance as to require the protracted attendance of the physician, an extra charge of three dollars per hour to be made. The more important operations in surgery to be charged for according to the attendant difficulty and danger. Venesection, two dollars extra; extracting a tooth, the same; cupping, five dollars extra. Fifty cents per dose to be charged for medicines supplied by the physician. When several members of a family are ill, one visit only to be charged, and one dollar extra to be allowed for each prescription.—*Ibid.*

CHEMICAL SOCIETY.

This society, which was instituted on the 30th of March, 1841, held its first anniversary meeting on the 30th of last month, when the following were elected to fill the offices attached to their names :—*President*, Thomas Graham, Esq.; *Vice-Presidents*, W. T. Brande, J. T. Cooper, Michael Faraday, R. Phillips, Esqrs.; *Secretaries*, Robert Warrington, Esq., G. Fownes, Ph. D.; *Foreign Secretary*, E. F. Téschmacher, Esq. The number of members at present is 127, fifty having been added during the past year.

UNIVERSITY COLLEGE.

Dr. Murphy, late assistant physician to the Lying-in Hospital, Dublin, has been elected to the professorship of midwifery, in University College, vacant by the death of Dr. Davis. There were, we understand, eleven candidates for the office.

OBITUARIES.

Died, at Berlin, on the 11th of January, in the 55th year of his age, M. Ossan, president of the Medico-Chirurgical Society of Berlin, and editor of the "Journal of Practical Medicine."

M. Devergie, author of a "Treatise on the Venereal Disease," died at Paris, on the 13th of March last.

We have also to record the death of M. Fricke, of Hambourg, and of M. J. Fontenelle, of Paris.

PROMOTIONS AND APPOINTMENTS.

War-office, April 8.

TO BE ASSISTANT SURGEONS.

Assistant-surgeon Henry Clinton Foss, from the 37th Foot; Assistant-surgeon William Antony Tongue, from the Staff; Benjamin Swift, M.D.; William Green Trousdell, Esq.; William Parker Young, Esq.; Christopher Ninian English, M.D.; Edmund Alexander Parkes, M.B.; Patrick Sinclair Laing, Esq.; John Innes, Esq.

4th Foot—Thomas Dehane Lightbody, M.D., vice Allman, appointed to the 78th Foot.

8th Foot—Surgeon William Gardiner, from the 83rd Foot, to be surgeon, vice Maitland, who exchanges.

83rd Foot—Surgeon John Maitland, M.D., from the 8th Foot, to be surgeon, vice Gardiner, who exchanges.

Brooke Young Townsend, Esq., to be assistant-surgeon, Hospital Staff.

NAVAL.

Surgeon—R. M'Crea, to the Sappho.

Assistant-surgeons—J. Mahon, to the Fair Rosamond; D. N. Tucker, to the Caledonia; J. W. Dickenson, to the Winchester; W. H. Slegget, to the St. Vincent; Alexander Borthwick, to the Mastiff; Archibald Sibbald, to the Fly.

Assistant-surgeon Francis Sharp, of the Conway, to be surgeon.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted on Friday, April 8, 1842.

Horatio Henry Handey, William Henry Horsell, John Ellerton Stocks, George Johnson, John Cuthbert Ithaley, John Taylor Pearson, Samuel Waudby, Theophilus Miller Gunn, George Marshall Phillips, Arthur Wellesley Newenham, Frederick James Genet, John Gladdish Sanders, John Henry Hill Lewellin.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, *Strand, London.*

TERMS.

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TO CORRESPONDENTS.

New members of the Provincial Association can have the back numbers to Jan. 1, 1842, by forwarding to us the name of a *country* bookseller through whom they may be sent.

J. B.—There are no dispensers in the army or navy. The office of assistant-surgeon is in the gift of Sir William Burnett for the navy, and of Sir James M'Grigor for the army. Persons having any influence with either of these gentlemen should be applied to.

The letter of our correspondent at *Malta* has been received; we hope soon to hear from him again.

The newspapers from *Cheltenham, Liverpool*, and *Dublin*, have come to hand. We shall thankfully receive any newspapers from the country containing local intelligence.

The request contained in a note from *Ross* has been complied with.

Mr. Brame's case in our next.

Plymouth.—The title-pages and index of Vols. II. and III. of the "Provincial Medical and Surgical Journal" were published with Numbers 52 and 79 of that Journal.

Petworth.—We have not received the communication alluded to by our correspondent.

Erratum.—At page 19, col. 1, of our last number, an error in the making up has occurred, which renders the text unintelligible. The first twelve lines of col. 1, should be transposed after the words "on children and" at line 28.

COMMUNICATIONS, JOURNALS, AND BOOKS FOR REVIEW, TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND, OR 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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COURSE OF CLINICAL LECTURES ON SURGICAL DISEASES,

DELIVERED AT THE HOSPITAL OF LA CHARITÉ,

By Professor Velpeau.

Lecture XIX.

DISEASES OF THE BREAST.

Gentlemen,—The female breast is subject to a great variety of diseases, some common to it and other parts, some peculiar to the organ. I do not propose bringing all these affections before you, but shall rather dwell on those which have not yet received, in my opinion, sufficient attention.

Diseases of the breast, in the female, may be classed under two heads—1, inflammation and abscess; 2, tumours and painful affections. I shall, however, confine my present remarks to the first class.

Inflammation of the Breast.

Under inflammation we comprise excoriations, fissures and eczematous affections of the nipple, erysipelas, and the different forms of phlegmon.

1. *Excoriations.*—Many women, who suckle for the first time, during the early weeks suffer from a kind of softening, and more or less sensibility of the nipple. In many cases the nipple becomes excoriated or inflamed, or several small ulcers may form around its base. This state occurs particularly in young women, of fine, delicate skin, and lymphatic, nervous constitution; too frequent suckling, want of cleanliness, and imperfect formation of the nipple, are predisposing causes; it is easily recognised by the pain produced during the act of suckling, the red, granular, or fungous appearance of the nipple, and by a slight exudation of blood which takes place when the infant draws the breast strongly. The exciting cause of this affection is the act of suckling; the child should, therefore, be applied to the breast at certain intervals only; as a lotion, I have used a solution of salt, wine, or even brandy, with the best effects. Should these means fail, you may apply, frequently during the day, Goulard's lotion, equal parts of oil and red wine, or, if a stronger astringent seem requisite, of oil and lime-water. Sir Astley Cooper spoke favourably of a lotion composed of a drachm of borax, with half an ounce of alcohol, in three ounces of water.

When mild means, such as those I have just mentioned, fail, I have recourse to the lunar caustic or zinc lotions; the white precipitate ointment may also be employed with advantage. It is necessary, of course, to prevent any powerful substance from passing with the milk into the child's mouth; an artificial nipple must be employed. In this way excoriations of the nipple may generally be healed.

2. *Fissure of the Nipple.*—The excoriations just spoken of sometimes give rise to fissure of the nipple or areola. These are sometimes very deep, give rise to considerable hæmorrhage, and occasion excessive pain. They likewise disturb the secretion of milk, and may render it impossible for the woman to continue suckling. The treatment of this unpleasant affection is the same as that already pointed out for excoriations; but it now and then becomes so insupportable that the medical man has recourse to much more active means. Lotions, with corrosive sublimate or calomel suspended in an infusion of marshmallows, have been tried. I have found the latter beneficial, but would never think of employing so dangerous a remedy as the former. In obstinate cases you must touch the fissures with a stick of lunar caustic. The use of artificial nipples is more requisite here than in the case of simple excoriation.

3. *Eczema.*—I have frequently seen not only the nipple and areola, but nearly the whole mamma, covered with an eczematous eruption. In one lady the skin was thick, red, hard, and so painful that the existence of cancer was apprehended; the symptoms, however, were soon removed. In other cases there is simple or syphilitic eczema, and a large yellow or copper-coloured crust covers the whole of the areola.

The disease requires the same treatment here as when seated in any other part of the body. I find the best effects from warm baths, and the use of an ointment containing a drachm of white precipitate to an ounce of lard. Should the disease, however, be connected with syphilis, you must of course direct your attention to the constitutional disorder.

4. *Erysipelas.*—The breast is liable to be attacked by every variety of erysipelas; but as there is nothing peculiar in this disease when it attacks the breast, I shall not dwell on it here. I may, however, remark that it is frequently complicated with diffused phlegmon. In one case I saw an example of erythema nodosum, and one of the knotty tumours terminated in suppuration.

Whenever diffuse phlegmon—a disease which should not be confounded with common inflammation of the breast—appears as a complication of erysipelas, you must at once have recourse to general and local blood-letting; but if these fail to arrest it, do not lose any time; divide the parts freely and deeply with numerous incisions, if you would avoid the occurrence of gangrenous suppuration.

Inflammation, properly so called, of the female breast, occurs so frequently, and is attended with such a variety of effects, that it deserves a much greater share of attention than has hitherto been bestowed on it. One of the most important points connected with this subject is to distinguish the particular structure in which the inflammation begins. Experience has convinced me that the symptoms, progress, and treatment of the disease differ according

as it may be seated in the subcutaneous tissue, in the gland itself, or in the cellular tissue under the gland.

The following table indicates the order which I shall follow in my remarks to you on this subject:—

1. Subcutaneous inflammation of
   a. The fatty tissue;
   b. The nipple, or areola.
2. Submammary inflammation, divided into
   a. Idiopathic;
   b. Sympathetic.
3. Glandular inflammation.
   a. Congestion;
   b. True inflammation.

1. *Subcutaneous Inflammation.*—The cellulo-fatty tissue of the breast presents in its arrangement several peculiarities worthy of notice. Beyond the areola, it is analogous to cellular tissue in other parts of the body, and inflammation, when seated in this portion, resembles exactly inflammation in other parts. Under the areola and nipple we have a different arrangement. As the tissue approaches the former part, it loses its adipose element, becomes thin, and is confounded with the gland on one side, and the skin on the other. Hence it is necessary to examine the circumstances attending inflammation in these different structures.

2. *Inflammation of the Adipose Tissue.*—This may be acute or chronic, diffused or circumscribed. When the inflammation is extensive, the integuments become red, warm, and dry; there is a superficial, pricking pain, aggravated by the slightest touch. Tumefaction now ensues, and occasionally is considerable, though seldom or never extending to the areola and nipple. The latter are depressed, and form a cavity proportioned to the surrounding tumefaction. This is an important diagnostic sign. The local disease now gives rise to constitutional symptoms; the skin is hot, the tongue white; the patient complains of headache, &c.; and, in a word, we have the ordinary effects of reaction in the system. In the majority of cases the inflammation is circumscribed to certain points of the surface, and gives rise to little or no constitutional disturbance. The disease may extend from without inwards, from within outwards, or may commence in the adipose tissue itself. These are not useless distinctions, for our prognosis is much influenced by the manner in which the disease is developed. In the first case, it is excited by some irritation of the skin from stays, &c., and is of little consequence. But, in the second case, the subcutaneous inflammation commonly depends on some pre-existing disease of the mammary gland. Finally, the inflammation may, as I have said, commence in the adipose tissue, and depend on some external cause, or on some internal predisposition which escapes our notice.

The progress and symptoms of the inflammation are the same in the three cases alluded to. It may be distinguished from erysipelas by the tumefaction existing between the skin and gland, and being circumscribed; by the colour of the integuments, which are of a regular rose or purplish brown tint; and by the dull, deep pain, unlike the burning sensation of erysipelas. From inflammation of the lymphatics it is distinguished by the absence of red striæ running towards the neck and axilla; from phlebitis, by the absence of signs of purulent absorption; and from diffuse phlegmon, by its being circumscribed.

This form of inflammation generally terminates in resolution or suppuration. In some cases, indeed, an indurated portion of tissue may remain, and undergo different changes, but of these I do not propose speaking now. When left to itself, it almost always ends in suppuration; and of this I shall speak when I come to abscesses.

Treatment.—Your first care will be to remove every predisposing cause of the affection. If the woman be young and plethoric, and the inflammation run high, blood-letting must be had recourse to, followed by leeches. The bosom is then to be covered with a linseed meal poultice, which is to be renewed two or three times a day; if necessary, it may be moistened with a solution of opium or acetate of lead. When the patient is delicate, and the inflammation mild, general blood-letting will not of course be required; from fifteen to forty leeches may be applied to the breast; I find, by experience, that it is better to place them over the inflamed points than round the mamma.

Should the use of local blood-letting be contra-indicated, or little benefit be derived from it, we may have recourse to frictions with mercurial ointment. You must have seen several cases in this hospital where the disease had been completely removed, and in a short time, by mercurial frictions, after general and local bleeding had been tried with trifling effect. In cases of this kind, also, the very best results are obtained by compression; and I cannot too earnestly recommend practitioners to have recourse to this means when the inflammation has been reduced to a subacute state.

I have frequently succeeded in dissipating subcutaneous inflammation of the breast by large blisters applied for a short time, and then repeated; but this practice should be reserved as a last resource, especially with private patients.

Whatever method of treatment you may adopt, you should be careful to support the bosom with a proper bandage, and desire the patient to lie on the healthy side. The local remedies now indicated may be assisted by constitutional treatment. In mild cases some laxative medicine or an enema will answer; but if the inflammation run high, or occur in nurses or puerperal women, you must purge your patient freely with castor-oil, scammony, jalap, &c.

You must not expect, however, to subdue the inflammation in all cases by these means. Suppuration frequently ensues in spite of your efforts.

Inflammation of the Areola and Nipple.

The tissues which compose the areola and nipple are so intimately connected with the texture of the gland, that it is difficult to understand how they can be inflamed without involving the organ. Still this does occur, and you will meet with cases in which the nipple and areola are inflamed, painful, and tumefied, giving to the breast a conical form. Cases of this kind generally occur in nurses and puerperal women; the inflammation has a strong tendency to resolution, if the exciting cause be removed and a proper treatment adopted; or it may terminate in a number of small abscesses.

The first point in the treatment of this affection is,

to withdraw the child from the breast. When the patient is strong, and the inflammation severe, blood should be drawn from the arm, and leeches, with poultices, applied.

Sub-mammary, or Deep-seated Inflammation.

The cellular tissue, which unites the mamma to the pectoral muscle and cartilages of the ribs, is lax, and hence inflammation in this part has a great tendency to become diffused. On the contrary, we have seen that inflammation in the subcutaneous tissue has a tendency to be circumscribed. Like the latter, deep-seated inflammation may extend from the mamma to its subjacent cellular tissue, or from the parietes and contents of the thorax, or finally commence in the tissue itself. Let us say a few words on each of these varieties.

Most medical men have had occasion to observe the variety of which I now speak, as a consequence of some affection of the walls of the chest, or its contents. I have seen deep-seated inflammation of the mamma excited by organic disease of the lungs, effusions into the cavity of the chest, and by fractures, necrosis, &c., of the ribs. The following case is an illustration.

A woman, 37 years of age, was admitted into hospital in December, 1836. She had caries of the fourth rib, under the external edge of the left mamma, where there was a fistulous opening. I was about to resect the diseased bone, when violent inflammation attacked the deep cellular tissue of the breast. The reaction was so violent as nearly to destroy the patient. The breast was greatly enlarged, although the colour of the integuments remained unchanged. In six days an abscess formed, and an incision gave issue to nearly a quart of pus.

Inflammation may commence, as I have said, in the deep-seated cellular tissue, without our being able to determine the exciting cause. The case which I shall now relate proves the truth of this.

A young girl, 18 years of age, received a severe blow in the breast; the injury was followed by dull deep pain, and five days afterwards the organ appeared to be much enlarged. The skin of the breast presented a normal appearance, and the tumefaction evidently existed in the deep-seated tissues. Sixteen ounces of blood were drawn from the arm, and thirty leeches were next applied round the breast, which was covered by a poultice; three days afterwards there was evident fluctuation, and about a wineglassful of pus was discharged, on an incision being made. After a lapse of four days I saw the patient again. The bosom was now of a natural size, the discharge of pus was moderate, and in nine days the wound healed.

From what I have said, you perceive that inflammation of the deep-seated tissue of the mamma may be idiopathic or symptomatic. Its signs are—tumefaction of the breast, the surface of which is tense, prominent, and occasionally streaked with enlarged veins.

If the inflammation be violent, the skin of the breast is warm and of a light rose colour. The gland appears as if it were raised up from the walls of the thorax, and pushed forwards, and is free from any inequalities or livid spots on its surface. The disease is usually attended with severe constitutional disturbance. We shall presently see by what characters it may be distinguished from inflammation of the glandular structure.

The texture and arrangement of the tissues explain why the progress of the disease is so rapid. I have seen several cases in which the gland had acquired double or treble its natural volume in forty-eight hours. These cases commonly end in suppuration or resolution; gangrene sometimes occurs, but I am not aware that induration has been observed.

From what I have said you will at once conclude that this form of inflammation must be attacked in an energetic manner. Its course is so rapid that you have little time to lose. Topical applications are of little use; you must have recourse to copious general blood-letting, followed by the application of leeches around the mamma, and not on it; at the same time you must administer calomel and tartar emetic in large doses. From the combined use of these remedies I have obtained the best effects; but it may happen that you fail to cut short the inflammation; suppuration will then ensue. Of this, however, and of inflammation of the mammary gland itself, I shall speak at another time.

HISTORY
OF A
PUERPERAL FEVER IN DONCASTER.

By Robert Storrs, Esq., Surgeon.

The following is a detailed account of several cases of puerperal fever which occurred in my practice at Doncaster, during the months of January, February, and March, 1841. The history of the cases will be followed by some remarks on what appears to me to have been the true origin of the disease:—

Case I.—On the night of the 7th of January, 1841, or early on the morning of the 8th, the most severe night of the winter, when the thermometer was lower than it had been known to be for some years, I delivered Mrs. Downes, a hard-working washerwoman, of her tenth child; her labour was perfectly natural, though rather more severe than she was accustomed to, and she had severe rigors previous to delivery, which I ascribed to the severity of the night. During the whole of the 8th she felt quite well; but had a copious perspiration, the effect apparently of the previous shivering. On the morning of the 9th, about thirty hours after delivery, she was seized with another severe rigor, preceded by severe pain in the loins and abdomen, and in the limbs. When I saw her, about two hours afterwards, she had a pulse of 130, small and feeble; a flushed yet sunken and dusky countenance; a hot but moist skin; great tenderness of the abdomen; enlargement of the uterus; and some tympanitis; tongue red at the tip and sides, brown and dry in the middle, with sordes. The lochia were deficient in quantity, dark and foul in smell; milk less than usual for the time. Considering it to be a case with more typhoid symptoms than I had observed in all my previous cases of peritoneal inflammation in the puerperal state, I prescribed a dozen leeches only, and gave a dose of calomel and opium, followed by an aperient mixture. In spite of these remedies the tympanitis increased; the pulse became quicker; uncontrollable

purging came on; and, with the concurrence of my friend Dr. Scholfield, I commenced with stimulants. The same night she remained with a pulse of 150 or upwards, continued diarrhœa, rapid and laborious breathing, great tympanitis and hiccup, until her death, which took place on the morning of the 12th.

Case II.—On the morning of the 13th I attended Mrs. Boyd, of Cautley, a delicate woman, who had suffered for many years from scrofulous abscesses, and who had been in very ill health prior to her pregnancy, being dropsical and apparently declining. She had a tedious, but not severe labour, and appeared to be doing quite well on my visit next day. Almost immediately on my leaving her, she was seized with rigors, about thirty hours after delivery. I was not called to her, however, until the following day, when I found her with most of the symptoms as described in the last case: pulse 140; skin hot, but moist; tongue red and dry; great pain in the abdomen; tenderness on pressure over the uterus, which was enlarged; tympanitis; lochia quite natural; and milk the same. Leeches, calomel and opium, mustard plasters, blisters, turpentine fomentations were used with no other benefit than some relief to the pain, and at night I considered it necessary to give stimulants. She died on the 17th.

Case III.—Mrs. Briggs, a remarkably healthy woman, aged 28, but who had lately become a landlady, and had also been attending on her husband in an attack of typhoid erysipelas, was confined during the night of the 12—13th. I was sent for to Mrs. Boyd from her; she remained apparently quite well until the 17th; the milk was well secreted, and the lochia natural, though rather on the decline. On that day she was seized with violent pain in the left hypogastric region; abdomen much swollen; uterus enlarged and tender; pulse 110 and weak; countenance very much sunken; lips and around the eyes livid; the eyeball remarkably sunken; great anxiety of countenance; constant sighing. She had had diarrhœa up to the period of her confinement, but had since been obliged to take castor-oil. Leeches were applied to the abdomen; turpentine and anodyne fomentations; blister, calomel and opium, with aperients. When the bowels were moved, excessive diarrhœa came on; the stools were passed in bed; and though the pulse did not obtain the remarkable frequency observed in the other cases, she went on sinking until she died on the 22nd; the abdomen remarkably tympanitic, and the breathing greatly disturbed to the last. Stimulants were had recourse to on the second day.

Case IV.—Mrs. Berry, of St. Sepulchre-street, Doncaster, a delicate woman, aged 26, was confined of her first child on the morning of January 24, after a difficult labour, with breech presentation. She was seized with shivering on the following day, succeeded by pain and tenderness in the abdomen; some uterine enlargement; pulse about 104, very soft. She was treated with calomel and opium one dose; leeches, blister, and fomentations. After the bowels were moved, diarrhœa came on, followed by a remarkable prostration of the muscular system, loss of power in articulating her words, and a train of nervous and hysterical symptoms. These were combatted by blisters to the neck, and opiates, with three doses of calomel, and opiate enemas; she had also wine in moderate quantities. She gradually but slowly recovered. She has not yet (April, 1842) quite recovered her power of speech.

Case V.—Mrs. Hird, of Marsh-gate, Doncaster, a delicate woman, was confined on February 8th; had an ordinary labour, and continued well until the 12th; the secretion of milk being established, and the lochia natural. On the 12th she was seized with shivering, succeeded by diarrhœa; pulse 110, soft, and feeble; countenance pallid, sunken, and dusky. The diarrhœa was checked by calomel and opium and chalk mixture, but returned on the 13th more severely; the abdomen tympanitic; uterus enlarged and tender; pulse 118. Leeches were applied to the abdomen, preceded by a blister, fomentations, and poultices, and a full opiate was given. On the 17th she was much improved, and went on well.

Case VI.—Mrs. Bullas, of High Ellers, three miles from Doncaster, aged 36, mother of six children, was confined of her seventh child, February 12; she seemed to be quite well during the 13th, except having a little more than usual of nervous agitation, which I partly ascribed to a more than usual discharge of blood during the expulsion of the placenta, and partly to the dread which the recent deaths had inspired. During the early part of the morning of the 14th she was seized with shivering; great embarrassment of the breathing; violent pain down the back, and in the hips; some tenderness of the abdomen, and enlargement of the uterus; pulse 140 and feeble; tongue clean; countenance deadly pale; lips dark. I was sent for during the forenoon, and found her as thus described. A full opiate with ammonia relieved the pain in the back, but it continued in the hips and abdomen. The abdomen now became tympanitic, and the pulse still quicker. With the concurrence of my friend, Dr. Scholfield, besides the usual local remedies, I gave her the sp. terebinth., which only excited intense sickness, and she died on the 16th. There was no alteration in the smell or appearance of the lochia during the whole time; the urine remained pale, and the milk was secreted up to a late period, when the breasts became flaccid.

Case VII.—Mrs. Pearson, of Cleveland-street, Doncaster, a healthy woman, mother of many children, was confined February 19, attended by my friend Mr. Loxley, for me. I called to see her a few hours after her labour, and found her going on well. I called again on the 21st, and found she had just had a severe rigor, succeeded by pain in the abdomen; tenderness and enlargement of the uterus; great difficulty of breathing, and great pain in the head. I immediately bled her, and gave her a good dose of calomel and opium, which relieved her much; pulse fell from 120 to 96; a profuse perspiration came on, and I hoped she would go on well. In the evening, as the pain had increased, and the pulse appeared to indicate it, she was again bled to a less amount, but still to syncope; the blood was highly buffed on both occasions. After this, Dr. Scholfield continued to attend her with me; leeches and blisters were applied, turpentine fomentations and poultices; calomel with opium was given every four hours: but in spite of all, the pain in the abdomen increased, tympanitis came on, the breathing became more difficult; wine and opiates were subse-

quently given; she died February 24. In this case the lochia were offensive towards the last, and the milk impeded at an early stage.

Case VIII.—Mrs. Williams, of Bantergate, Doncaster, a delicate lady, whose husband was consumptive, had consequently undergone much mental and bodily fatigue, besides the shock produced by the death of her friend, Mrs. Bullas, and the others; she was confined February 24, early in the morning, after a rather more than ordinarily severe labour, having, generally, remarkably easy ones; it was a face presentation. She was seized with shivering on the afternoon of the 25th; had not very severe pain, or much tenderness of the abdomen; very little heat of skin; pulse 120, and soft; no interruption of the functions of the lochia, or milk. Dr. Scholfield attended her with me, and I gave up the management of the case entirely to him. She was ordered fomentations, mustard plasters, &c., calomel and opium, with castor-oil. In the morning the pulse had increased in frequency, was soft and and feeble; breathing rapid; abdomen tympanitic. Leeches and blisters were ordered. In the evening the tongue became dry; the pulse more rapid, 150 or 160, and the skin moist and clammy. She died on the 27th at noon. There was but little alteration in the lochial discharge, or in the secretion of milk, until symptoms of sinking came on.

Case IX.—Mrs. Wilson, Marshgate, Doncaster, mother of nine children, hitherto healthy, and having good recoveries, was delivered, after a short and easy labour, on the morning of March 21. She had a good deal of pain and some tenderness over the region of the uterus from the first, having had a fall, in which she hurt the lower part of the abdomen, some weeks ago. On the 22nd, at midnight, I was called up to see her, and found she had had a very severe rigor, followed by excessive pain at the chest, going through to the back; intense difficulty of breathing; abdomen rather swollen; uterus enlarged and tender; pulse 140 or upwards, and bearing compression well; skin hot; countenance pale and shrunk; tongue clean. I immediately bled her to faintness, about sixteen ounces; blood very buffy. I gave her a scruple of calomel, followed by forty drops of laudanum. The difficulty of breathing and pain in the chest were much relieved, and when I saw her at eight, a.m., the pulse had gone down to 136, at which it continued during the day. Twelve leeches were applied to the abdomen, and with the concurrence of my friend, Dr. Branson, who saw the case with me, three grains of calomel, with half a grain of opium, were given every four hours until evening, when the pulse had abated to 120; the gums were evidently affected by the mercury, and I had hopes that she would go on well. Late at night the pulse again rose to 136, and in the morning, as the abdomen was more enlarged and tender, more leeches were applied; but the pulse became quicker and quicker, and she gradually sunk, and died on the 25th. The lochia were unaltered to the last, and the milk unimpeded until nearly death took place. All the subsidiary means, as common and turpentine fomentations, poultices, &c., were used, and wine and other stimulants given when the powers of life began to flag.

Case X.—Mrs. Bask, of Cleveland-street, Doncaster, aged 25, a healthy woman, was confined of her second child after an easy labour, on the morning of March 22. She remained apparently well until the 25th, when she was seized early in the morning with shivering, followed by pain and tenderness of the abdomen; pulse 120 and full. She was bled to faintness, and a scruple of calomel given her; the blood was buffy; the pain was relieved after the bleeding. Dr. Branson now saw her with me. She remained during the day in a somewhat quiescent state; pulse under 120; and her symptoms less severe than in most of the previous cases. The gums showed evident signs of being affected by the calomel towards night. On the following morning, however, she began to be worse; intense vomiting came on; the breathing became rapid; the abdomen enlarged, and the uterus swollen; and she gradually sunk the next day. The lochia remained untainted and natural, and the milk continued to be secreted up to the last. All the other local and general means were made use of, as mentioned above. In both the last cases, diarrhœa came on at the close of the disease.

Case XI (*Peritoneal Inflammation*).—Althæa Badger, aged 21, the young woman mentioned in the history as being attended by my pupil, Mr. G. C. Denham, the day after he had applied a bandage to the leg of Mrs. Richardson (the case of gangrenous erysipelas with abscesses), was delivered, June 13, in the evening. Tuesday morning I called to see her, and found her in the commencement of an attack of inflammation, having had a severe rigor. She had considerable pain in the uterine region; great tenderness on pressure; a hot skin; and pulse 116; tongue moist; no anxiety or appearance of depression in the countenance. I bled her immediately, and gave her a dose of six grains of calomel and two of opium. In a few hours I saw her again. She had besides had twelve leeches applied; the blood was cupped and buffy; the pain had returned. I therefore again bled her, ad deliquium, with decided relief. The pulse sunk from 120 to 110, but rose again in the evening to 124, but was much softer; the blood was this time also excessively buffy and cupped. On the following morning, after a full opiate, I found her much relieved; pulse 96; all pain, and most of the tenderness of the abdomen, gone. A few leeches were again applied over the uterus, the tender point, and she recovered quickly without any other alarming symptoms. The attack in this case in no way differed from an ordinary case of inflammation in the puerperal state, and it was probably induced by her having only come into the workhouse the day before her seizure, after a fatiguing journey on foot. I merely mention the case, because it is the only one in which inflammation has occurred in my practice since the above unfortunate ones, and it has *some* connexion with what I believe to have been their origin. Could a less concentrated state of poison have produced a milder disease?

REMARKS.

During the whole of the winter of 1840-1, erysipelas, typhus fever, and scarlatina of a malignant form, prevailed in Doncaster to an unusual extent, especially erysipelas, which I have never before known to be so general or so severe. Puerperal fever was never

known to have prevailed epidemically up to this time, or if it did so, it was never acknowledged. On the night of January 7th, or early on the morning of the 8th, the most severe night of the winter, when the thermometer was lower than it had been for many years, I attended Mrs. Downes (Case I), a hard-working washerwoman, with her tenth child. Her labour was perfectly natural, though rather more severe than she was accustomed to, and she had some severe rigors previous to delivery, which I ascribed to the severity of the night. On the morning of the 9th, thirty hours after delivery, she was seized with another severe rigor, succeeded by severe abdominal pain, excessively rapid pulse, and all the symtoms ascribed to puerperal fever in its severe form. She died on the morning of the 12th.

On the morning of the 13th, I attended Mrs. Boyd (Case II), of Cautley, four miles from Doncaster, an infirm woman. She was seized with severe rigors, also, thirty hours after delivery, and died on the 17th.

On the same day, January 13, I attended Mrs. Briggs (Case III), a remarkably healthy woman, aged 28, at Doncaster. She remained quite well until the 17th, when she also was attacked, and died on the 22nd.

Mrs. Berry, aged 24, a delicate woman (Case IV), was confined at Doncaster on the morning of the 24th; the disease commenced on the 25th, and she was dangerously ill for some time, but at length recovered.

Mrs. Hird (Case V), also a delicate woman, was confined at Doncaster of her fourth child on February 8. She remained well until the 12th, when the usual symptoms set in, though less severely, and on the 17th she was convalescent.

Mrs. Bullas, of High Ellers (Case VI), was confined of her seventh child, February 12. She was attacked on the 14th, and died on the 16th.

Mrs. Pearson (Case VII), of Doncaster, was confined, February 19, of her seventh child. She was attended by my friend Mr. Loxley; I called a few hours afterwards and merely spoke to her; she was doing well; when I called again on the 21st the fever was just commencing, and she died on the 24th.

Mrs. Williams (Case VIII), a delicate woman, was attended by me, on February 24, of her fourth child. She was attacked on the 25th, and died on the 27th.

Besides the above eight cases of fever, I attended sixteen other females in labour, from the 8th of January (the day on which I attended the first unfortunate case) to the 26th of February, all of whom did well; some of them within a few hours of those who took the fever, and in two or three instances I went from one to the other. When the first three cases of fever occurred, I changed all my clothes, and used every means I could think of to prevent its spread. On the occurrence of another case I again did so, and after each succeeding one, made use of such precautions as extreme anxiety suggested. At the same time, I must confess, I had a strong impression that the cause of the disease was epidemical, and that my brother practitioners in the town would probably also have cases of a similar nature. I now determined to leave home for a time, under the hope that, after a change of air, I should be freed from the poison, which I could not now but suppose clung to me personally. I left home on March 1, making a tour among my friends, chiefly on the borders of Wales, and returned with renewed hopes on the 16th, having again had an entire change of clothes, and using every precaution (as I thought) with respect to ablutions, &c.

On the morning of the 21st, I again attended a woman in labour, Mrs. Wilson (Case IX), mother of nine children, residing in Marsh-gate, Doncaster. On the 22nd, at midnight, she was first attacked with the usual symptoms, and died on the 25th. On the morning of the 22nd, before Mrs. Wilson was seized, I attended Mrs. Bask, of Cleveland-street, Doncaster. She remained quite well until the 25th. She was then attacked by the usual symptoms, and died on the 27th. Being now led to suspect that some extra puerperal causes produced the mischief, I was confirmed in the suspicion by the opinion of Dr. Thompson, of Sheffield, whom I happened to meet in consultation, backed by the experience of Mr. Reedall, of the same town, who kindly sent me his opinion through a common friend; and the cases which I was most inclined to blame I mentioned to Dr. Thompson, who confirmed me in the belief that the fever had probably sprung from them. This was a case which had been, in the commencement, gangrenous erysipelas of the leg and foot, in a stout gross woman, a near neighbour of mine, of the name of Richardson. On looking back at this case, I recollected that I had been called to her on the very evening prior to my attending Mrs. Downes, the first case, and that the person who was with the latter, as a neighbour, was also a neighbour and friend of Mrs. Richardson, and had been there also on the same evening. And though this erysipelatous case speedily lost its gangrenous character, a succession of abscesses appeared, which every now and then required to be opened, some of them containing a large quantity of offensive pus. The last of these abscesses I opened on the morning I attended the last case but one of this melancholy series. It contained an immense quantity of foul pus, more than a washhand basinful was evacuated, and even then it was far from being emptied. I now determined to cease my attendance altogether on this case, and the patient was taken off my hands by my friend Dr. Branson, who continued to attend her until her recovery was completed, which was some months afterwards. I attended on the 22nd and 24th three other cases of midwifery, having made every possible ablution, and in an entire change of clothes; all the patients did well; but considering that it would be too great a risk to continue to do so after producing such a great amount of misery, I determined I would attend no more for a time; I consequently left off the practice for about a month, and am happy to say that, since that time, I have had but one case to cause me any uneasiness; I have gone on as successfully, though perhaps more anxiously than was my former wont. Besides the decided opinions of Dr. Thompson and Mr. Reedall, I am much indebted to my friend Mr. James Allen, of York, and to Mr. Smith, of Leeds, for pointing out to me the probability of the disease arising from some such cause as the one assigned; though, when I saw them, so decided a coincidence as the opening of an immense abscess, and the commencement of fever in two cases immediately following it, had not so strikingly attracted my attention. Having, however, now had my attention completely

aroused, I found, on reference to my day-book, that on the very day or the day previous to having attended in labour, all the cases from the 4th to the 8th inclusive—except the 7th—I had opened an abscess, or dressed the wounds of this erysipelatous case; and though I had taken every pains to prevent the conveyance of the contagion from one puerperal case to another, yet having been unaware of the danger of this particular case, I had probably carried the fomes from it to every one of them.

As a somewhat singular coincidence, or corroboration of this opinion, I was requested some months afterwards, on June 11th, to visit Mrs. Richardson, who sent me word that she was nearly well, but wished I would apply a bandage to her leg. My mind, however, misgave me, and I sent my eldest pupil, Mr. G. C. Denham, to do it on Saturday the 12th. On Sunday he was sent for to the union workhouse to a labour, where he remained all day; the case was tedious, but delivery was at length safely accomplished shortly after my visiting the woman that evening. On the Tuesday I called upon her, and found her in the first stage of an attack of intense inflammation. She was bled, &c., and after a day or two of extreme danger, recovered. Having assured myself, as I think satisfactorily, that this case of gangrenous erysipelas and abscess, was the origin of the mischief, in all the cases but one, I was yet in doubt how that case had arisen (No. 7), as I did not attend the case myself; she was attended by my friend Mr. Loxley, of the dispensary, and was merely visited by me subsequently. On investigation, I found that her case was also intimately connected with erysipelas, which might have been indirectly transmitted through me in the following manner:—

On February 18, I attended, in labour, a Mrs. Barrett, of Cleveland-street, a neighbour of Mrs. Pearson, who did well; but her child was seized with erysipelas of the abdomen, from the navel to the genitals, of a gangrenous character, and died on February 4th. Mrs. Pearson (Case VII) laid out this child, and was confined herself on February 19th, attended by Mr. Loxley; she was seized with fever on the 21st, and died on the 24th. Her infant (Mrs. Pearson's) was sent out to nurse to a neighbouring village, and was seized with erysipelas when a fortnight old, which also assumed a gangrenous character, and the infant died on March 27.

Another of the cases of puerperal fever was also incidentally connected with erysipelas—viz., Mrs. Briggs (Case VIII). She was delivered, and continued on the same bed in which her husband had lain, who had only just recovered from a severe attack of erysipelas and typhoid fever.

The above cases show not only the probability of the disease having arisen from the precise cause above mentioned, but also its intimate connection with erysipelas generally. The two cases, however, which occurred so soon after my return home, and before I had had any connection with any other erysipelatous case, show, I think, the exact source from whence they sprung.

I will now revert to the cases not of a strictly erysipelatous character, which seemed to me to have owed their origin to the same disease. Ten days after the death of Mrs. Boyd, of Cautley (Case II), I was called to see her mother-in-law at the same house, who was seized with intense pleuritic inflammation, with typhoid symptoms. I saw her on January 27th, and she died on the 29th, being ill only two days; she was upwards of seventy years of age. Mrs. Lockwood, of Caultey, waited on Mrs. Boyd and mother; she had also a mild attack of typhus fever, but recovered. Her son was seized with the same disease after the mother's recovery, and got better after a tedious illness.

Mrs. Mandy, of Nag's-head-yard, Doncaster, a neighbour of Mrs. Briggs (Case III), who visited and assisted in nursing the latter, was seized a few days after the death of Mrs. Briggs, with severe pleuritis, attended with phlegmonous inflammation, and the formation of an abscess on the chest above the right mamma, and extensive erysipelatous inflammation down the same side to the hip, which has since produced adhesion of the cellular texture to the ribs, and absorption of that structure. She recovered very slowly and with great difficulty. A young woman, whilst waiting upon her, was seized with shivering and subsequent fever, went home and died in a week, it is said, of typhus fever. I did not see see her, and only know from heresay.

An unmarried sister of Mrs. Bullas (Case VI) came over to see her, and arrived just before her death, on February 16. She was seized on the 24th with severe herpes zoster of a malignant character, the blisters of which contained blood or bloody serum, were surrounded with severe erysipelatous inflammation, followed by considerable sloughing, and attended with typhoid fever. Subsequently a large abscess formed in the breast, which was cured March 30. She then soon got well. The sister-in-law of Mrs. Downes, the first case, was taken ill of typhus fever a few days after Mrs. D.'s death, and was in a state of considerable danger for some time, but recovered. The whole of these cases, whether erysipelatous or not, form a chain of connection with each other.

The probability of the identity of erysipelas and puerperal fever has been lately stated by Mr. Nunnely, of Leeds, in his work on erysipelas; but unless many diseases—such as typhus fever, &c.—are classed under that head, and consequently very great latitude is given to it, such an opinion must be quite untenable. It will be observed that many of the cases above related, which arose from the miasm of erysipelas or of puerperal fever, produced fevers of an ordinary or of a typhoid character, according to the condition of the patient at the time, influenced also probably by the more or less concentrated state of the poison. I am by no means disposed to confine the origin of puerperal fever to *gangrenous* erysipelas alone, though it is my firm belief it arose from it in the cases above related, for even in them it was produced from the matter of abscesses long after the disease had ceased to be gangrenous. I believe it may also readily be propagated from one individual to another, so that if a person be unfortunate enough to attend a case of the kind, without great precaution, he may be liable to transmit it to others, whom he may be attending in the puerperal state. In many cases there is good reason to believe that it arises from attendance on post-mortems, especially where there has been peritoneal inflammation. A friend of mine told me that he had

no doubt but that in his practice it once arose from his having been called to a labour after the post-mortem of a fatal case of strangulated hernia; though in cases of this description there are often, probably, circumstances both of an erysipelatous and of a gangrenous character. I should also be disposed to believe that it may often be propagated by cases of erysipelas without gangrene, especially if accompanied by typhoid fever.

It appears to be the fashion on the continent to consider puerperal fever as epidemical, not as contagious. I was much struck by reading a review of two works on puerperal fever in the "British and Foreign Medical Review," the writers of which, Dr. Helm, of Vienna, and Dr. Kiwich, of Prague, both consider the disease to arise from epidemic influence alone. Many of our own writers on the subject do not speak, in my opinion, sufficiently decidedly on the point of its contagious origin. The strongest expressions used by Dr. Ferguson on this point are, at page 29 of his work, "Of the connection between erysipelas and puerperal fever, I may say that these two maladies are generally coexistent in our hospital, and that when the mothers die of puerperal fever the infants perish of erysipelas. Gordon, in the history of the Aberdeen epidemic, and Hey, in that witnessed at Leeds, both observed the same connection. The inference is obvious—that those causes which produce the one *favour* the other." Again, at page 105, "There are many facts to prove that those who attend on these patients are seized with erysipelas. I have elsewhere stated that the infants of those who die of puerperal fever perish of erysipelas." Other cases have likewise been lately published which establish the origin of puerperal fever from erysipelas. One of these, related by Dr. Hutchinson, of Nottingham, was read before the Medico-Chirurgical Society, and gave rise to a discussion, in which Dr. Merriman and others took a part, agreeing on the connection of the two disorders, but being apparently unwilling to confess the directly contagious power in the one or the other. This paper of Dr. Hutchinson's was published in the "Lancet" of April, 1840. There is also a paper by Dr. Ingleby, of Birmingham, in the "Edinburgh Medical and Surgical Journal" for 1838, in which this contagious origin of the fever is distinctly stated.

During the progress of the disease in my practice, I had not seen the last-mentioned cases, and had only read the work of Dr. Ferguson, who, though he speaks decidedly on the point of erysipelas arising from puerperal fever, is less strenuous in stating that puerperal fever arises from erysipelas. He is content with stating that those causes which produce the one favour the other. I was obliged, therefore, to depend on my own observation, and that of my friends, for the formation of my opinion of the decided power of erysipelas in producing puerperal fever by contagion, and am now only induced to trespass thus far in relating my cases and opinions, that the knowledge thus painfully obtained may be disseminated, and may be the means of preventing, in some instance, that spread of misery and death which it was my misfortune to witness.

I have now resolved, and have so far acted on the resolution, that I will always, as far as it is practicable, change the dress in which I attend my ordinary patients, on being called to a case of labour, feeling satisfied that if it does no other good, it will be an easy means of endeavouring to prevent myself from being a vehicle of contagious disease in circumstances of extraordinary susceptibility; and I recommend the like precaution to all those who practice the obstetric branch of their profession.

I have not yet touched on the treatment of the disease, because it is plain that where death so constantly follows every variety of treatment, it can only be of very secondary importance to a knowledge of the origin of the disease, and to its consequent prevention. With regard to the above cases, they were severally treated according to the strength of the constitution, the inflammatory symptoms present, the rapidity of the typhoid, and low symptoms; and the degree of depletion was regulated by the consideration of these circumstances. I did not find that bleeding had any other effect than that of temporarily mitigating the severity of the disease; and it will be observed that it was only had recourse to from the the arm in three cases, and these apparently the most likely to be benefitted by it. Leeches were always of service in mitigating the pain, and, in one of the cases which recovered, were, with the assistance of a blister, the means of suddenly removing the tympanitis which existed to a great extent. Calomel, which was only tried in large doses in the two last cases, seemed to be of essential service in arresting, and, though very temporarily, suspending the progress of the disease, and in each led me to hope for a short time that at last I had discovered a remedy; but its effects soon failed, and my disappointment has forced me to believe that, in severe cases of this fever, there is no remedial means that can be relied on, but that, as surely as the patient is seized with the full characteristic symptoms of the disease, she will almost as surely die. All the other remedies which were used I scarcely set any value on. Of turpentine, as an internal medicine, I have a very unfavourable opinion; in two cases in which it was so employed, it caused intense sickness, and hurried on the sinking symptoms; as an enema, it was of service in removing tympanitis.

Opium, at an early stage of the disorder, in a single full dose, is, I think, of use; and at an after stage, when the vital powers are flagging, it is of service in smaller doses, where there is much suffering; but it is by no means the same useful remedy it is found to be in ordinary puerperal peritonitis, or in those frequent cases of severe spasmodic pain which threaten inflammation. Fomentations, common or medicated, are always of some service, as are mustard plasters, and occasionally in mild cases blisters, where you have time; but in most of the cases which occurred to me, the period for treatment was so short, that any means which required time for their action were too slow to do good. The turpentine fomentation, in having a speedy blistering effect, seemed to be the remedy most generally applicable as a counterirritant. Being in great dread of propagating the disease, I made no very earnest endeavours to obtain examinations after death, being satisfied that the subject on this point was already too well studied to have any light thrown upon it by my humble means.

I must again repeat that I have no wish, in publish-

ing this account, but to disseminate the knowledge of the contagious nature of puerperal fever, and add my humble mite to the stock of knowledge of the causes from which it may arise. I have no theory to establish, and have merely added these few observations to the cases, that the subject might be more intelligible than a bare relation of the cases alone would have made it. Should the account ever prove a means of averting a similar calamity, I shall be amply repaid for the slight trouble of investigating the subject in this instance, and giving the results. None of my brother practitioners in the town had a case.

Doncaster, April 13, 1842.

SPONTANEOUS OBLITERATION OF THE AXILLARY ARTERY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I have much pleasure in sending you a case of sudden and spontaneous obliteration of the left axillary artery, which terminated in complete recovery.

Mrs. Elizabeth Skelton, a married lady, 24 years of age, pale complexion, and dark hair, had been, during the autumn of 1831, in a disordered state of health, from irritation of the intestinal function, and neuralgia of the face. These symptoms were relieved by the ordinary remedies, and her health gradually improved. Soon afterwards she became pregnant.

On the 6th of November, and in the tenth week of her gestation, hæmorrhage took place from the uterus. On the following day it was very profuse, and terminated in abortion.

On the afternoon of the 8th she was seized with severe headache, giddiness, dimness of vision, and vomiting; so great, indeed, was the interruption to the vision, that she could not distinguish the hands of a common clock. The same evening she felt sensations at the extremities of the fingers of the left hand, as if they had been scorched. The integuments at these points felt hard, assumed a whitish appearance, and became so painful, that she feared a whitlow was about to form at the end of every finger.

Early on the morning of the 9th she awoke from very disturbed sleep, and was greatly alarmed by intense pain and numbness of the whole left arm. The headache had somewhat subsided; but there was such a return of the dimness of sight, that she could not discern any object around her. The left arm had now become cold, insensible to external impressions, and almost motionless. The wrist and tops of the fingers were discoloured, especially that of the ring finger, which was turning black. On examining the arteries of the superior extremities, the pulse of the right radial was regular, frequent, and small; but that of the left had completely ceased, neither could any pulsation be found in the left ulnar, left humeral, or axillary artery, below the superior margin of the tendon of the pectoralis minor muscle. The pulse of the left subclavian artery was very distinct above the clavicle. No tumour nor swelling of any kind could be discovered along the course of the above-named arteries by the most careful examination. There was no perceptible disturbance of the action of the heart, and no embarrassment of the respiration, nor were the pupils of the eyes in any marked degree dilated.

On the 10th the vision was restored, but there was no return of pulsation in the arteries of the left arm. The appearance of the fingers, and the insensibility of the limb, were the same. The pulse of the right radial artery was regular, frequent, and small. The tongue was clear, and the general health not undisturbed.

On the 13th the vision continued uninterupted. The pulse of the right radial artery was 100 in a minute; that of the left was imperceptible, and there was no pulsation to be felt below the point of the axillary artery before stated. The sense of feeling was in a degree restored as far as the wrist, which was less discoloured, and the temperature was somewhat increased; but the forearm continued intensely painful, and deprived her of sleep. The appearance of the fingers was the same.

On the 16th the arm continued severely painful, full of tingling, and felt as if it had been dipped in cold water, and would burst; nevertheless, its temperature and muscular power were slowly advancing. The extremity of the ring finger was black and hard; the relative condition of the arteries of the arms was the same.

20. The limb continued remarkably painful, and was reduced in size. Around the dry crust of the ring finger there appeared a line of separation, manifested by a slightly elevated circle, containing a minute quantity of pus; there was also the smallest quantity of the same fluid beneath the cuticle at the extremities of the other fingers. No pulse could be found at the left wrist, but when a ligature was carried around the upper arm the veins became distended below it.

From this period the limb continued to improve in temperature, feeling, size, and power.

In the middle of December the left hand could feebly support a wineglass. The dead integumental caps of the thumb, first, second, and last fingers, had become dry, and were nearly thrown off, whilst that on the ring finger adhered firmly to the sound parts; but it had occasioned neither discharge nor fetor, nor any of those results which usually attend the more common process of gangrene.

At the latter end of April, in the following year, the muscular powers of the limb had so far increased that it could raise a light chair from the ground, and assist in carving her food. The arm had gradually become less painful, and had regained its normal sensibility.

On the 23rd of June (229 days from the commencement of the disease), the dried slough on the ring finger adhered to the phalanx only, and looked like a convex black horn button; around its base a slight inflammatory action was kept up, but without the least discharge of any kind. No pulsation could be detected in the arteries of the left, fore, or upper arm. The limb now presented a plumper appearance, and above and below the elbow measured in circumference only half an inch less than its fellow. The top of the ring finger exfoliated in August, *nine months* from the commencement of the disease.

From that time she has enjoyed good health, and has borne several children. In her last labour the placenta presented, and required the artificial turning

and delivery of the child. I saw Mrs. Skelton a few days ago, when she was perfectly well, but no pulsation could be felt in any of the arteries of the left arm.

In sending you the above case, I do not presume to have added any new fact to pathological science. Mr. Turner, in the third volume of the "Edinburgh Medico-Chirurgical Transactions," has given an interesting paper on this subject, in which he has adduced several cases of this kind; indeed, I believe he has brought forward all that is known of the pathology of this disease. However, in examining the cases related in his paper, I do not find one so unassociated with any other premonitory circumstance, or terminating in so complete a recovery.

To enter upon any reasoning as to the proximate cause of the obstruction in this case, would be taking up too much space in your valuable journal; but, judging from what took place in other cases, which terminated less favourably, and were examined after death, it may be conjectured that the obliteration was occasioned by spontaneous rupture of the internal coat of the artery, and the projection of its edges into the tube.

Mr. Turner's paper will tell the reader all about the matter.

I remain, Gentlemen,
Yours, &c.,
W. S. Oke, M.D.

Southampton, April 14, 1842.

ARTIFICIAL PREMATURE LABOUR.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—If you consider the following case worthy your notice, you will oblige me by inserting it in the "Provincial Medical Journal." I am fully aware, in transmitting this case to you, that I have been solely carrying out a practice long since established in midwifery; but, as it has been a case of some interest to myself, I thought it might prove so likewise to some of the junior members of the Provincial Association.

Your obedient servant,
Samuel S. Brame.

Lowestoft, April 12, 1842.

Elizabeth Bristow, aged 28, has been married seven years, and pregnant six times. Having a slightly contracted pelvis, and generally very large children, she has never been able to give birth to a fœtus at the full period of utero-gestation, without submitting to the operation of embryotomy. Her first confinement took place in September, 1836, when she was delivered of a living child in the eighth month, no artificial means being used to bring on labour.

In the month of December, 1837, having gone her full time, the operation of embryotomy was performed for the first time.

In October, 1838, I first attended her, when she gave birth to a seven months' child. On the 4th of September, 1839, embryotomy was the second time performed upon a nine months' fœtus. At that time I desired her, should she ever become pregnant again, to inform me of the fact at the end of the seventh month. In her fifth pregnancy she miscarried towards the conclusion of the sixth month, in November, 1840.

Not having forgotten my request made to her at the last operation, her mother called upon me, a short time since, to say that her daughter was again pregnant, and in her seventh month. Being childless, and naturally dreading to undergo an operation so distressing to the feelings of a mother, she earnestly requested me, if it were possible, to relieve her at once. I waited until I considered she was somewhat advanced in her eighth month; and on Saturday, April 2, at twelve o'clock at noon, after administering a dose of castor-oil, and subsequently an enema, I punctured the membranes, by introducing a pointed quill through the os uteri, using the index finger of the right hand as a director.

Half an hour after this operation about two pints of liquor amnii escaped, the patient experiencing at the same time slight pain in the abdomen. Irregular pains, preceded by shiverings, supervened; on the following day, at noon, the os uteri was fully dilated. At six o'clock on the same day I administered a dose of the ergot of rye, which was repeated at seven o'clock, and at eight my patient was delivered of a living child, thirty-two hours after puncturing the membranes.

Both mother and child are doing well.

NEWCASTLE MEDICAL AND SURGICAL SOCIETY.

The eighth anniversary meeting of this valuable institution was held a few nights ago, when a report of the proceedings of the past year was read by Mr. Greenhow, the indefatigable secretary of the society. We shall best convey an impression of the objects and prospects of the society, by giving an extract from the report:—"Its proceedings during the past year have been characterised by more than ordinary interest, both as regards the number of facts and the practical information which have been brought forward at the monthly meetings, and the interesting discussions to which they have given rise. The increasing success of these meetings, and the larger number of members in attendance at them, have contributed, in no small degree, to the greater popularity of the society, and promise to be the means of enlarging the sphere of its usefulness, by inducing many gentlemen, who had not hitherto joined the society, to enrol themselves amongst its members, that they may share in the important benefits which it is so well adapted to diffuse throughout the ranks of the profession in the neighbourhood. It was the earnest wish of the originators of the institution that it should comprise, in its list of members, the names of all the practitioners in the district, as a means of concentrating professional and scientific information, and promoting social and friendly feeling amongst them; and the desire lately manifested to enter into the society encourages a reasonable hope that the early anticipations of its founders are about to be in a great degree realized." *Floreat res medica.—Gateshead Observer.*

PROVINCIAL MEDICAL JOURNAL

SATURDAY, APRIL 23, 1842.

The decision of the Court of Queen's Bench in the case of Greenhow, and the verdict obtained against Mr. Roberts at the last Gloucestershire Assizes, have legally set at rest the long disputed question between chemists and medical practitioners. It is, in truth, astonishing that so simple a question could have disturbed for so many years the practice of medicine in these countries. Men, who were totally unacquainted with the structure and functions of the human frame, who knew little of medicines beyond their names, and nothing of their action on the human economy, were permitted to dispense the sources of life and death in undisturbed tranquillity. A few attempts had, indeed, been made to suppress this violation of the law and of common sense, but without success, until it was at length established that the mere placing of a blue bottle in a window, and painting the word "chemist" over a door, did not confer the right of practising medicine on every tradesman who might open a druggist's shop.

We trust that the chemists and druggists of the United Kingdom will now feel the necessity of keeping to their legitimate occupation—the preparation and sale of medicines. They are a most respectable and industrious body of men; they have been misled by the uncertainty of judicial opinions and the misrepresentation of the word "dispense" in the Act of 1815, into a line of conduct which the principal members of their society always deprecated, and we hope that the error, now clearly demonstrated, will be abandoned.

It were easy to show that the chemists, as a body, gain little by the practice of medicine. Compelled to exercise their skill on the poorest of the people, and prosecute their usurped profession with fear and trembling, the emolument which they derive must be inferior to that of the tradesman who is content with his legitimate calling. In every point of view, therefore, the practice is unjustifiable; it is contrary to law—destructive of the interests of society—and little profitable. The more respectable members of the trade are, as we have said, opposed to the pretensions of their less scrupulous brethren; but a certain number of the latter will always be prepared to violate the law, and assume the quality of medical practitioners. To this act, it must be confessed, the state of the medical profession in England holds out much encouragement.

The facility with which the chemist is enabled to transmute himself from a dealer in drugs to a healer of disease has been occasioned by the custom of open-shop-keeping, amongst the legitimate members of the profession. Well-educated people know that there is no necessary connection between the sale of remedies and the science of medicine; they know that chemists are tradespeople who supply the material substances which the mind of the medical man applies to the cure of disease; they would as soon ask a Weiss to cut them for the stone, because he sells excellent knives, as employ a Bell in a case of fever, because he he sells excellent chemicals. With the poorer and less educated order of society, however, the case is far different. The poor man is accustomed to enter the surgeon-apothecary's shop, and receive advice and medicine for all his minor and many of his major ailments. He sees the enormous brass plate on the door—the goodly show of bottles in the window—the patent and quack medicines on the counter—the starved apprentice behind the mahogany—everything which denotes the tradesman; he tells Æsculapius junior that he has a bad cough, receives a mixture, and pays one and sixpence. In the chemist's shop he finds a fac simile of the apothecary's; the chemist he therefore considers to be a medical practitioner under another name, and on him he bestows his confidence and his patronage, the more readily that he pays less for his draught, because, generally speaking, the chemist has enough of conscience left to charge nothing for his science.

The medical profession, then, has chiefly to blame itself for the injury which its members receive from the practice of medicine by chemists and druggists. If the medical practitioner had always confined himself to the science of his profession, and the administration of drugs to his own patients, the chemist would likewise have been confined to his own sphere; but when the professors of a liberal art assume the appearance of tradesmen, and make science altogether subservient to the gross materials with which it works, it is not strange that the tradesmen should convert themselves into professors, and, by a liberal display of material, induce the ignorant to believe them possessed of science in abundance.

We have thus drawn attention, briefly, to what appears to us the chief cause of the position into which chemists and druggists are gradually elevating themselves. The law, as it stands at present, cannot effect much, because in execution it is too cumbrous and expensive. The law, however, may be amended; and now that the judges of the land have decided that chemists have no right, either by custom or statute, to practice medicine, they cannot complain of any violation of long-established privileges, if they be restricted by law to their legitimate calling. Whether any benefit would accrue if the medical practitioner were, on his side, to renounce the trade of drug-selling, is a point which demands considerable reflection. There is no doubt but that the respectability of the profession would be materially increased if the

trade were separated from the science; but in the present state of society, and with habits which have been fostered by long custom, it may be inexpedient to shut out certain classes of the people from a mode of medical relief on which they have been for so many years dependant. One effect of such a measure would inevitably be, to place the chemist in the position of the apothecary—to transfer the medical care of a large portion of the population to the very persons from whose hands we are so anxious to rescue them.

Lord Granville Somerset's bill on lunatic asylums was read a first time in the House of Commons on Wednesday last. We have already directed attention to the objectionable proposal of the noble lord to entrust the supervision of county lunatic asylums to two barristers. We feel much pleasure in announcing that this proposal was successfully combatted by Mr. Wakley. The member for Finsbury endeavoured to induce the House to sanction the appointment of two medical men instead of two barristers; but, on perceiving that the feeling of the House was against this proposition, he prudently changed his ground, and carried an amendment, whereby the commissioners to be appointed should not have their profession stated, but the choice should be left to the Lord Chancellor.

REVIEWS.

On Rheumatism in its Various Forms, and on the Affections of Internal Organs to which it gives rise. By RODERICK MACLEOD, M.D. London: Longman and Co., 1842. 8vo. pp. 164.

Although the work of Dr. Macleod does not present us with anything very original on the subject of rheumatism, it furnishes throughout evidence of having been written by a practical physician. As a practical treatise, then, we can recommend it to our readers. The work is divided into fourteen chapters, each of which contains about ten pages. In the first we have a brief account of the causes and seats of rheumatism; in the second rheumatic fever is described; Chapter III. contains the treatment of acute rheumatism; Chapters IV., V., VI., and VII., are devoted to the complications of the disease and their treatment; in Chapters VIII., IX., and X., we find the history of capsular rheumatism; in Chapters XI. to XIII. are described the muscular, neuralgic, and periosteal forms of the disease. Finally, in Chapter XIV., we have a very complete statistical view of rheumatism, taken from the public records of St. George's Hospital, and extending over a series of nearly eight years.

Atmospheric vicissitudes are, according to Dr. Macleod, the chief cause of rheumatism; hereditary disposition, and the having once laboured under the disease, are likewise predisposing causes. Women are more subject to acute rheumatism than men, and the early period of adult life is that at which it is most prevalent. The chief seat of the disease is in the fibrous textures.

Of the forms of rheumatism, the author distinguishes five—viz., the rheumatic fever, the capsular, muscular, neuralgic, and periosteal forms. The leading features of rheumatic fever are well sketched by the author; but we find little in the chapter devoted to it with which the profession is not already familiar. Dr. Macleod says, however, that he thinks he has "several times seen rheumatism of the tunica albuginea testis. Persons subject to rheumatism have complained of acute pain in one testicle, coming on suddenly, accompanied by increased heat, and by great tenderness to the touch, but without tumefaction; the symptoms shifting from one testis to the other, and at last disappearing as suddenly as they had come on—just in the manner we see rheumatism change from one joint to another."

In the treatment of acute rheumatism, the author is guided by the principle that at its onset it is amenable to the same laws as other inflammations. Blood-letting is, therefore, the chief remedy. Upon this point the author remarks,—

"I should say that in well marked cases of rheumatic fever, within the first week of their onset, and in individuals of the average degree of robustness, from twelve to twenty ounces of blood may be abstracted with advantage, several successive times, in the course of five or six days. In judging of the propriety of repeating the venesection, the three points chiefly requiring to be attended to are the state of the blood, the character of the pulse, and the effect produced upon the rheumatic pains."

After bleeding, the most important remedy is purging; and, by the united use of both, the author affirms that acute rheumatism may be cut short, in a certain number of cases, within two, three, or four days. The remedy which stands next in importance to bleeding and purging is opium. This should be given whenever the pain has not been considerably mitigated by the above means within forty-eight hours. On the average, two grains in twenty-four hours are sufficient, but it may be necessary to carry the dose to four, six, or even eight grains. It is not expedient to join calomel with the opium, as many practitioners do, in acute rheumatism, and the author places little reliance on sudorifics. Of cinchona, also, which was praised in so pompous a manner by the late Dr. Davis, of University College, the author says "that its administration in rheumatic fever is not only contrary to all analogy, but equally forbidden by experience. Of local remedies, the only one which afford any relief is the application of leeches.

In Chapter IV., the author discusses rheumatic pericarditis. He shows that this complication was known to English practitioners long before the appearance of the work of M. Bouillaud, and justly observes, that it is rather an extension of the disease to the heart than a true metastasis.

The symptoms which mark rheumatic inflammation of the heart are carefully pointed out in Chapter V.; but the author has added nothing to the present state of our knowledge upon this point. He has omitted to mention, amongst the local signs, a perceptible elevation over the region of the heart, which exists in a certain number of cases.

The chief remedies in rheumatic inflammation of the heart are to be found in bleeding and mercury. The abstraction of blood must be conducted with caution; a smaller quantity should be taken away at a time, and the depletion repeated more frequently than when the disease is confined to the external parts. Fourteen ounces, according to the author, may be regarded as the average quantity, and it may be necessary to repeat the venesection to the same extent twice or thrice in the first twenty-four hours. Local depletion must also be adopted. To assist the effects of blood-letting, we must bring the patient rapidly under the effects of mercury, and purge him vigorously. When the symptoms show that effusion is taking place, blisters over the region of the heart are useful, and must be frequently applied. The morbidly irritability of the heart, which occasionally remains after the attack, may be allayed by opium, or prussic acid with a light bitter.

Capsular rheumatism differs essentially from rheumatic fever in its symptoms, termination, complications, and seat; it is, in various respects, closely allied to gout. Dr. Chambers has observed in a few cases a white deposit of carbonate of lime in the joints; but this appears to have been a rare exception, for in all the cases examined by the author and by Dr. Prout, it consisted of the lithate of soda.

Suppurative disorganisation of the joint is, according to Dr. Macleod, of much more frequent occurrence than has been suspected; he has never seen it in any other form of rheumatism than the capsular.

In capsular rheumatism there is very little tendency to affections of the heart; when the internal parts are attacked, they are the serous membranes of the brain or pleura. The treatment of this form of rheumatism differs essentially from that of rheumatic fever. General blood-letting is rarely required, but the application of leeches to the inflamed joint generally gives great relief. Tepid spirituous applications are often attended with the most soothing effects. Internally, colchicum is the great remedy. In the acute stage Dr. Macleod gives a drachm of the vinum colchici in divided doses in the twenty-four hours, combining the morning portion with a saline purgative. Or a drachm of colchicum wine and half a drachm of magnesia in a mixture (the third part thrice a day), may be prescribed when the bowels are very irritable. If the colchicum fail to act as an anodyne, from five to ten grains of the compound soap pill may be given. When the first acuteness of the attack has been subdued, the acetic extract of colchicum, with acetate of morphia or Dover's powder, exercises a kindly influence on the disease. Moderate purging must be kept up at the same time. The more chronic results of capsular rheumatism may be advantageously treated with the iodide of potassium, but the author thinks that the doses of this remedy should not be carried, as a general rule, beyond two grains, thrice a day, and that four grains ought to be the maximum dose.

Liniments and embrocations are generally useless. Dr. Macleod has derived much greater benefit from pouring tepid or hot water on the part. Affections of the brain or chest should be treated on general principles.

In Chapter XII. Dr. Macleod describes neuralgic rheumatism. This chapter, we must confess, is very meagre and unsatisfactory. Neuralgic rheumatism, according to the author, is a painful affection following the course of the nerves, and brought on by exposure to cold. Sciatica affords the best illustration of this form of the disease, which is also sometimes met with in the face and cheek. Dr. Macleod connects it with rheumatism, because it depends on the same causes (cold), yields to the same remedies, and often alternates with attacks of that disease. For the chronic form of this variety the author recommends full doses of the ammoniated tincture of guaiacum. When the neuralgic character becomes more prominent, relief is afforded by stramonium, aconite, and veratria. The first of these remedies, however, is very uncertain. Of the aconite, Dr. Macleod prefers the tincture to the extract. Five minims, three times a day, may be given, to begin with, and the dose gradually increased to twelve drops, thrice a day.

Cyclopædia of Surgery, Part IX. Article, Empyema. By W. H. Walshe, M.D.

In noticing the Cyclopædia of Surgery, generally, somewhile since, we stated our intention of from time to time examining more closely such of its articles as appeared to us to merit this distinction. We proceed to redeem the sort of pledge we then entered into, by drawing the attention of our readers to the essay on Empyema by Dr. Walshe, Professor of Pathological Anatomy in University College, a production which appears to us to be marked in a high degree by that sound practical spirit which should always form a prominent feature in a work of the pretensions of the "Cyclopædia of Surgery." The history of the various stages of the disease is most carefully traced, and the treatment of each settled upon as secure a basis as the existing state of knowledge permits. But the most striking characteristic of the article is the complete investigation which it contains of the physical signs of the disease. Dr. Walshe, after having examined these in all their bearings, forms his results into a table, which, contains the substance of all that has previously been said, and not only conveys more information than could otherwise be given in the same space, but is undoubtedly the most enlarged and satisfactory view which we have yet met with of the physical signs of any of the diseases of the thoracic organs.

Tables of this kind are extremely useful, when drawn up by one who is fully cognisant of the subject of which he treats. We should like to see a series of them, from the pen of Dr. Walshe, arranged after the plan of the one to which we now allude, and printed in a convenient form.

STRUMOUS IRITIS.

The hydrochlorate of baryta has been highly spoken of, both by Mr. Phillips, in his lectures on surgery, and also by Dr. Payan, as a valuable remedy in strumous ophthalmia.

ACADEMY OF MEDICINE, PARIS.

March 28.

LITHOTRITY.

M. Auguste Mercier presented a memoir on the subject of lithrotrity, in cases complicated with retention of urine, and on a new mode of extracting the fragments of calculi. For this purpose the author proposed the use of an instrument which he has invented, one portion of which allows of the escape of the detritus, while through the other a current of water is passed into the bladder.

URETHROPLASTY.

M. Segalas communicated the details of the following case:—A patient, when six years of age, tied a piece of string round the penis; the results were gangrene of the organ, and the formation of a fistulous opening, which gave passage to the urine and semen. The orifice in the urethra was an inch in length, and the portion of canal anterior to it was very considerably contracted.

M. Segalas placed a catheter permanently in the bladder, and divided the prepuce, to make the integuments more lax. When the wound was healed, he passed a catheter again, to guide the bistoury, with which he opened freely the membranous part of the urethra; he then withdrew the catheter, introduced a gum-elastic bougie, and converted the latter into a syphon, with an œsophagus bougie. A few days afterwards he made two semilunar incisions, before and behind the fistulous opening, dissected off the skin, and then brought the edges of the wound together with six points of twisted suture. A bougie had been passed into the wound of the membranous part of the urethra, and brought out, in front, through the meatus urinarius: the penis was now enveloped in lint dipped in cold water, and the syphon put into action. The edges of the wound quickly healed at every point, except near the left side, where the sutures were too far asunder; this, however, soon contracted, and an excessively small orifice only remained. At the end of two months the wound in the perineum was allowed to heal up, but a few drops of urine now escaped from the pin-hole already alluded to. This was cauterised several times without effect; its edges were therefore resected, and brought together by a single suture. The fistulous opening was definitively cured by the last operation.

WOUND OF THE BRAIN.

M. Velpeau read a report on a case of severe injury of the brain. The patient had a portion of the skull carried away; considerable portions of the brain came away through the opening, or were removed during the subsequent suppuration; but the patient recovered without having been affected with paralysis.

DISLOCATION OF THE STERNUM.

M. Maissoneuve presented to the academy two preparations taken from patients who had luxation of the first portion of the sternum on the second. Cases of this kind are extremely rare. The first patient was a man, 32 years of age, who fell from a height of forty feet on his neck; he survived six weeks. The second patient was a man, 42 years of age, who fell from the same height on his pelvis, and was killed on the spot. The lesion of the sternum was identical in both cases; the body of the sternum was placed in front of the upper piece; the periosteum, in front, was not lacerated.

TUMOURS DEVELOPED ON CICATRICES.

M. Gimelle showed a soldier, who had been wounded with a yataghan in seven different parts of the body. On all the cicatrices were formed flat, pediculated tumours, of a rose colour, and somewhat resembling mushrooms. The patient never had syphilis. M. Gimelle wished to have the opinion of the academy on the nature and treatment of the disease. An interesting discussion ensued on those points. M. Velpeau regarded the tumours as examples of keloide. M. Gerdy and other members were disposed to consider them as simple vegetations from the cicatrix or wound, and recommended excision.

FIBROUS TUMOUR OF THE UTERUS.

M. Gery showed a fibrous tumour of the uterus, weighing five pounds, which had been removed by M. Chaubart. The patient, a woman 50 years of age, had borne several children; she was suddenly attacked with retention of urine, and experienced pains similar to those of labour. It was impossible to pass a catheter. On introducing the finger into the vagina, M. Chaubart felt a tumour, which filled the whole of the pelvis, and projected through the os uteri; on pushing it back, the catheter could be introduced.

A hooked forceps was now fixed in the tumour, and the latter drawn to the vulva; it was afterwards removed by excision, and very little hæmorrhage ensued.

POOR-LAW MEDICAL RELIEF.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In your Journal of this day you have some pungent remarks on the violation of the "order" of the poor-law commissioners in the Wimborne union;* and as other boards of guardians in this county may feel disposed, if not prevented, to violate the "order," you may, perhaps, not think the following remarks amiss at this time, and may probably be able to assist me in the solution of one or two questions on the subject of the said "order," and its accompanying letter respecting the remuneration to medical officers' qualifications. When I first read them, I felt disposed to think that, if *fairly* acted on, they would be approved by the profession generally, and be considered as a great improvement on the system hitherto adopted by most, if not by all, boards of guardians.

Allow me to observe, however, that the letter bears date *March* 12*th*, and was, therefore, most probably not received by the clerk of the different boards until the 15th or 16th, and in most instances not brought under the notice of the guardians before the 20th or 21st, and as on the 25th nineteen out of twenty of the medical contracts terminate, and as fresh contracts are generally made at least a fortnight before the expiration of the year, it necessarily follows, judging

* The remark of our correspondent affords us an opportunity of correcting an error into which we have fallen, in the article alluded to by him. The "orders" of the poor-law commissioners are not valid until forty days after they have been issued. The *letter* of the order was not, therefore, violated by the advertisement of the guardians of the Wimborne union.—EDS.

from past events, that the guardians will not feel disposed to carry into effect the order of the commissioners, unless compelled to do so, before the expiration of another year. Should such a proceeding be sanctioned, I need hardly observe that upwards of 200 illegal practitioners will be again employed for another year. I do not mean to say that this was so managed by the commissioners as to defeat their own order for that period; but, unless they do interfere, I am quite sure such will be the result.

I am induced to call your attention to these matters, from observing what is going on in this county, and I will mention a few facts connected with my own, union. Three years ago I had the charge of a moderate sized district, the population being about 4,000, possessing, I should observe, the double qualification with nearly twenty years' experience, and at the end of the year, a full board unanimously passed a vote of thanks for the very efficient manner in which I had discharged my duty; but, at the same time, I was told that some of my parishes were to be taken from me, for the purpose of making another district for a person who has no qualification of any sort or kind, save the qualification of being related to two or three of the guardians, and who, until a short time before, had only acted as a dispenser and assistant, and who, I have reason to believe, had never served an apprenticeship, and to this piece of injustice I was compelled to submit, or suffer in various ways which you will readily understand. This person had the charge of several more parishes than I had, and has ever since continued to hold the appointment; and was reappointed for the ensuing year, ending March 25, 1843, a few days before the order of the commissioners was received. I ask, will this election be approved of and sanctioned by the commissioners, or will they compel the guardians to forthwith carry their order into effect? Can the present board of guardians consider the election of such a person, however respectable his general character may be, as binding upon them?

I am, Gentlemen,
Your obedient servant,
A Medical Officer.

Dorsetshire, April 16, 1842.

*** This letter is authenticated by the signature of the writer.—Eds.

PROVINCIAL LUNATIC ASYLUMS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—As the custody as well as the treatment of insane persons is daily becoming of more importance to the medical profession, and as some misapprehension still exists respecting the bill introduced into Parliament by Lord Granville Somerset for the better inspection of the above institutions, it seems desirable that provincial practititioners should be made acquainted with the description of asylums to which the measure applies; and a few remarks on those to which the bill has no reference may, perhaps, tend to elucidate the subject. It is generally, although not universally, known, that all houses in London, Westminster, and seven miles thereof, and in the county of Middlesex, for the reception of two or more insane persons, are under the control and inspection of from fifteen to twenty commissioners, who are annually appointed by the Lord Chancellor. Five, at least, of these commissioners are to be physicians, and two barristers. It is a singular fact, that there are as many patients collected together within the metropolitan district as are contained in all the other private asylums in the country. With reference to the proposed bill, no alteration is made within the commissioners' range.

What are strictly denominated *county lunatic asylums*, are regulated by 9 Geo. IV., c. 40. They are erected by the county, with the consent and under the jurisdiction of the justices at quarter sessions, and they are chiefly for paupers and criminal lunatics. Of these, I believe there are not more than eight or nine in number, and with their present management Lord G. Somerset does not intend to interfere.

His lordship's bill provides for the more effectual inspection of private houses, licensed by the magistrates at quarter sessions, for the reception of lunatics, without the commissioners' range. There are in England between sixty and seventy retreats of this description. In conformity with the existing law, they are visited by three or more magistrates, assisted by a physician, surgeon, or apothecary, four times a year. The medical officer accompanies the visiting justices; he cannot be expected to make many private inspections at the salary he receives; and, by-the-bye, he is not unfrequently elected on account of family connections.

The infrequency of these magisterial and medical inspections—their short duration, at long intervals—render it impossible for the visitors to ascertain the sanity of each inmate's mind; nor do they, in very few, if any instances, profess to enter into any such responsible and protracted investigations, with the view to authorise a patient's discharge. But his lordship said, "he had no intention whatever to decline the aid of the magistrates, or to induce them to discontinue the practice of visiting, as they had hitherto been in the habit of doing with great benefit to the inmates, the licensed houses throughout the several districts. Indeed, he was inclined to imagine that the regularity of those visits by the paid members of the commission would have the effect of rendering the magistrates more attentive in future to the performance of their duties." Notwithstanding this doubtful compliment to the visiting justices, it is more than probable whether the proposed measure will act as a stimulus to increased exertions. The ultimate effect will more likely be (if it is not the intention) to supersede the present medical and justicial inspection altogether. Is it not, therefore, absolutely necessary that these legal commissioners should have the assistance of one or more experienced persons, who have devoted no inconsiderable period of their lives to the study of mental diseases, in all their varied and complicated forms, before such responsible duties are conferred upon and undertaken by men who "neither traditionally nor by their writings" have shown any inherent qualifications to practice a branch of the medical profession? This part of the subject, however, has been so ably discussed in your last week's editorial remarks, that I conclude with an apology for the length of this communication, and remain,

Gentlemen,
Your obedient servant,
G. W. Dyke, M.D.

Corsham, Wilts, April, 1842.

RETROSPECT OF THE MEDICAL SCIENCES.

ARTIFICIAL ANUS.

Perhaps the most important of all the cases in which M. Amussat has performed the operation for making an extra-peritoneal artificial anus, is the one to which we were enabled to make only a brief allusion. It is that of an infant, whose rectum terminated in a cul-de-sac. But for the unexpected success which attended M. Amussat's operation, the little unfortunate must have perished a painful death, as very many have already done.

The child was born on the 20th of January, 1842, and was brought to M. Amussat on the 22nd, a false passage having been previously made by a surgeon, whose assistance had been required. After a very careful examination, it appeared to M. Amussat totally impracticable that an artificial anus could be established either in the anal or coccygeal region, and he therefore determined at once to open the colon in the left lumbar region.

"The child having been placed on his right side, a transverse incision, about two inches in length, was made midway between the crest of the ilium and the last false rib, commencing at the external border of the sacro-lumbalis and longissimus dorsi; the subjacent textures having been divided, the cellular and adipose tissue covering the kidney and colon was exposed. This was now, after a long and careful dissection, divided, after a great deal of uncertainty. The lower extremity of the kidney was fully exposed to view, but the intestine could not yet be recognised. The incision was therefore enlarged backwards and downwards (with an artificial light, the shutters having been closed), and M. Amussat saw (for his feeling did not afford him any certain indication) something of a violet colour, which he judged to be the small intestine, placed outside and before the kidney. That was pushed backwards, and the colon at length detected. Two tenacula were now introduced longitudinally, one from above downwards, the other in a contrary direction, in order to prevent any retraction of the bowel, and a longitudinal incision afterwards made; a considerable quantity of gas and meconium escaped. The edges of the opening in the intestine were fixed to the integuments by means of three sutures, and tepid injections administered. The hæmorrhage which occurred during the operation was easily suppressed by means of torsion." For several days the child did exceedingly well, without a bad symptom; but on the 7th of February it was found that there had not been any evacuation for forty-eight hours, and the abdomen was tumefied and painful on pressure. Bougies were introduced through the artificial anus, and injections afterwards thrown up, by which a large quantity of fecal matter was removed, and the child became easy. The opening was then kept patent by a small wax tent. The sutures came away on the ninth day after the operation, and the wound was perfectly cicatrised at the end of the fourth week. Defecation was then performed with the greatest facility, and the child appeared to be as well developed as any other of the same age. A small tent was kept constantly in the artificial anus, to prevent its closure.

In three of the instances in which this operation was performed, the cause of obstruction was scirrhous affection of the superior part of the rectum, and in a fourth, which proved fatal in twenty-four hours, the seat of stricture was found to exist at the juncture of the transverse with the descending portion of the colon, in which a portion of the vertebra of a bird had become impacted. The patient whose case is first recorded survived the operation five months, dying at last from peritonitis caused by the progress of the cancerous disorder which had caused the obstruction. The second, fourth, and sixth were living at the date of the report, but the fifth patient died in ten days after the operation, from ulceration of the bowels.—*London Medical Gazette.*

THE STRUCTURE AND USE OF THE MALPIGHIAN BODIES OF THE KIDNEY.

Mr. Bowman, of King's College, in a paper read before the Royal Society, has described the results of his examination of the structure and connections of the Malpighian bodies of the kidney in different tribes of vertebrata, and has shown that they consist essentially of a small mass of vessels, contained within dilated extremities of the convoluted uriniferous tubes. The tube consists of a transparent membrane, lined by epithelium, which, where it is expanded over the tuft of vessels, constitutes the capsule described by Müller. The renal artery in its subdivisions forms the afferent vessels of the Malpighian tufts, each of which, after it has pierced the capsule, divides and subdivides, terminating in convoluted capillaries, which are collected in the form of a ball, from the interior of which proceeds the solitary efferent vessel, passing out of the capsule by the side of the single afferent vessel. The efferent vessels, on leaving the Malpighian bodies, enter separately the plexus of capillaries surrounding the uriniferous tubes, and supply it with blood. The plexus itself lies on the outside of the tubes, on the deep surface of the membrane which furnishes the secretion; and from it the renal vein arises by numerous radicles.

The solitary efferent vessel of the Malpighian bodies, the author describes under the name of the portal system of the kidney, and compares them with the same system in the liver, both serving to convey blood between two capillary systems. These efferent vessels, having to supply the plexus of the cones, which is at some little distance, are often large, and divide themselves after the manner of an artery. They are portal veins in miniature.

Mr. Bowman proceeds to found on his previous observations, and on other grounds, a theory of a double function of the kidney. He conceives that the aqueous portion of the secretion is furnished by the Malpighian bodies, and its characteristic proximate principles by the walls of the tubes. After giving in detail his reasons for entertaining this view, he concludes by referring to the striking analogy between the liver and kidney, both in structure and function, and by expressing his belief, first, that diuretic medicines act specially on the Malpighian bodies, and that many substances, especially salts, which, when taken into the system, have a tendency to pass off by the

kidneys with rapidity, in reality escape through the Malpighian bodies; secondly, that certain morbid products occasionally found in the urine, such as sugar, albumen, and the red particles of the blood, also, in all probability, pass off through this system of capillaries.—*Lancet.*

CANCER.

In the various forms of cancer it has been shown by Müller and others, that the new growth consists of a mass of cells, which, like the vegetable fungi, develop themselves with great rapidity, and which destroy the surrounding tissues by their pressure, as well as by abstracting from the blood the nourishment which was destined for them. These parasitic masses have a completely independent power of distinct existence; they can be propagated by inoculation, which conveys into the tissues of the animal operated on, the germs of the peculiar cells that constitute this morbid growth, and these soon develop themselves into a new mass.—*Carpenter's Physiology.*

EFFECT OF LARGE BLEEDINGS.

It is an easy thing for the purpose of producing an immediate effect, or "knocking the disease on the head," as it is often termed, to take from a man two, three, or four pounds of blood; but, should he survive, the probability is, that he will not for several years, if ever, be the sound man he was before the shock his system has had inflicted upon it by such heroic proceedings.—*Nunneley on Erysipelas.*

SITE OF PNEUMONIA.

M. Grisolle, of Paris, states that out of 280 cases of pulmonic inflammation observed by him, 166 were of the right lung and 97 of the left; in 17 both lungs were affected. The editor of the "British and Foreign Medical Review" says, "adding these numbers to those published by Messrs. Barthe, Bouillaud, Briquet, Chomel, Forbes, Lombard, and Pelletan, we shall have a total of 1,430 cases, of which the right lung furnished 742, the left 426, while the inflammation was double in 262. This predominance of the right over the left side exists at all ages, a fact elsewhere referred to as it respects newly-born infants (Br. and For. Med. Rev., vol. vii., p. 28, Jan. 1839), and established in aged subjects by the inquiries of Messrs. Hourmann and Dechambre. M. Lombard, of Geneva, some years since, gave out a statement to the effect, that pneumonia of the left side is almost twice as frequent in adult females as in males, and that the same relation of the sexes is observed in infancy, though the numerical superiority on the part of females is at that period of life not so great. The latter of these assertions does not stand examination; the seventeen cases of pneumonia in the newly-born infant, in which a single lung only was affected, collected by Messrs. Valleix and Vernois, were every one examples of affection of the right lung. Nor is the former more tenable. M. Grisolle finds that pneumonia of the left side forms scarcely one-fourth of the total number of cases in adult females, while it constitutes about one-third in males of the same standing in point of age."

DIAGNOSIS BETWEEN PALPITATIONS FROM CARDIAC DISEASE AND CHLOROSIS.

Chlorotic Palpitations.—Puberty and female sex predispose—come on with other signs of chlorosis or anæmia—come on suddenly, and depart equally so—have perfect intermissions—are worst after bodily and mental excitement, and at the period when the menses ought to appear:—remit, under the measures which relieve the other chlorotic symptoms—stimulants, as iron, relieve—complexion pale, without lividity.

Palpitations from Cardiac Disease—are hereditary, precede the cachectic colour and appearance of the patient—never depart, but continue always with more or less violence:—stimulants aggravate—lips and cheeks livid.—*Dr. Canstatt—British and Foreign Med. Rev.*

STATISTICS OF LIVER DISEASE.

From a valuable document by Major Tullock, published in Dr. Johnson's new edition of his work on Tropical Climates, we find that in the Windward and Leeward command, of the average strength, 44½ were attacked with inflammation of the liver and jaundice, of whom died 1 in 12; and that in Jamaica, of the garrison 95 3-5ths, of which was fatal 1 in 11, were attacked. When we turn to the Eastern world, we observe, that in Madras the proportion attacked was 1 in 15 5-6ths, of whom died 1 in 14; whilst in Bombay the numbers attacked were 1 in 16½, in which the fatality was 1 in 17½. The deaths by hepatic diseases among the European troops in garrison at Fort William are stated in the returns furnished on the spot at 1 in 18, while at Chinsurah, but eighteen miles distant, they are 1 in 7; at Berhampore 1 in 9; at Winapore 1 in 6; and, lastly, in the General Hospital, Calcutta, 1 in 9. Mr. Martin suspects an error in the estimate for Fort William.—*Brit. and For. Med. Rev.*

ALBUMEN IN THE URINE.

Albumen exists in the urine under four principal conditions, and its presence then may render the diagnosis of the existing affection obscure.

1. Albumen appears in the urine in the course of several acute febrile diseases, or of those in which functional disturbance to a certain amount exists. In cases of this kind the quantity of albumen is in general very trifling; it appears very irregularly, disappears to return, or to cease completely. Under these circumstances, the quantity of albumen is not in general sufficiently great to render the distinction of the case difficult.

2. Albumen exists in the urine, as an attendant upon certain diseases of the heart, and some cases of pulmonary emphysema; its presence apparently depends upon mechanical hyperæmia of the kidneys. In such cases the quantity of albumen is not greater, or of greater constancy and regularity in its appearance, than in the former. If, however, the impregnation become considerable, we are almost warranted in affirming that Bright's disease complicated the cardiac lesion.

3. Albuminaria exists in certain dropsies depending especially upon a morbid state of the blood, and which, when far advanced, lead to œdema of the kidneys. Such is the state of things sometimes in children, who become the subjects of dropsy after scarlatina. Here no affection of the kidney exists except œdema, and the diagnosis may be rendered obscure by the anæmic character almost constantly presented by the urine. The distinction of the cases will be grounded on the fact that, in that now referred to, the appearance of albumen does not occur

until after dropsy has set in, that the quantity voided is generally much greater than in Bright's disease, and finally, that it appears only temporarily, and often irregularly. The diagnosis would be almost impossible, and it would be necessary to procrastinate before pronouncing an opinion, if the quantity of albumen discharged became tolerably abundant, and the observer had had no opportunity of examining the urine from the outset of the disease.

4. Albumen exists in the urine of some individuals who are perfectly healthy. Upon this it must be observed, that the first symptom of Bright's disease is albuminaria; the morbid changes of the blood, and the consequences of these, are consecutive phenomena. It may, then, be the fact that the presence of albumen announces the development of Bright's disease, although there are no other symptoms of the affection present. The subject so affected appears in the enjoyment of health, but at a later period will appear the characteristic phenomena of Bright's disease. It is, therefore, necessary to be on the watch in cases where albumen is voided by individuals apparently possessed of sound health. However, I observed for six months, at the Hôpital de la Charité, a strong, robust, and vigorous infirmary man, whose urine constantly contained a large proportion of albumen. The other properties of the fluid were normal. He was sent away at the end of six months, but I ascertained he filled the same office at la Pitié a year after. Whether he is destined to have Bright's disease at a future period, I am unable to affirm.—*Becquerel on the Pathology of Bright's Disease—British and Foreign Medical Review.*

SPASM OF THE STOMACH.

You will meet sometimes with what is called spasms of the stomach (and I suppose it is such) in gouty people, who are then said to have gout in the stomach. The pain comes on in sudden and severe paroxysms, and is removable in general by laudanum and stimulants—brandy, for example, or by the mustard poultice. On these cases, however, we look with jealousy and apprehension. In some instances the attack is really inflammatory, and would then be aggravated by a stimulant treatment.—*Dr. Watson's Lectures.*

BITE OF THE COBRA MANILLA.

Surgeon Sievwright attended a little boy, the son of the mess-sergeant of the 45th regiment, who had been bitten in the left foot, a moment previous, by a snake three inches and a half in length, called the cobra Manilla, the bite of which is considered to be far more dangerous than that of the large-hooded snake, the cobra de capella. The wound was on the inner side of the great toe. A ligature was immediately applied tightly above the injured part, which was excised, and suction made by a native servant, after which the bleeding surface was washed with liquor ammoniæ. The breathing now became stertorous and difficult; pupils slightly dilated; skin clammy and disagreeably cool, with languid, thready, and rapid pulse. Ammonia in small doses was now administered internally, and repeated with wine at intervals. Free scarification of the foot with a lancet was also practised. The threatening symptoms abated in fifteen minutes, and the child gradually recovered. —*London and Edinburgh Monthly Medical Journal.*

SUFFOCATING COUGH.

Mr. Robinson recommends closure of the patient's nostrils with the thumb and forefinger during expiration, and leaving them free during inspiration, when a paroxysm of suffocating cough is present, and he says that in a very short time the patient will be relieved. He adds that he has adopted this plan whenever he had occasion so to do, and always with success.—*London Medical Gazette.*

INDIGESTION.

Indigestible matters, to which the pylorus refuses a passage, may remain in the stomach, and disturb its functions for days, or even sometimes for weeks together. Sooner or later vomiting is set up, and the offending substance expelled. I lately saw a mass of hard curd—a small cream cheese in respect to consistence—which was thrown up after several days of severe gastric pain and disorder. The relief was immediate and complete. The patient had been taking large quantities of cream with his tea and coffee. In another person a similar fit of indigestion terminated in the ejection of a mass of snuff. This is no unusual source of derangement of the stomach among those who use lavishly that nasty luxury.—*Dr. Watson's Lectures.*

ANNULAR CONTRACTION, OR STRICTURE OF THE AORTA.

John H., aged 38, was admitted with nodes and extensive ulcers; he became icteric, and, after a few weeks, was carried off with severe bronchial obstruction.

The body was well formed, slight, and moderately fat. A little fluid was found in the pia mater. The lungs were large, full, œdematous, and a little emphysematous. The larynx and trachea contained a very abundant muco-purulent secretion; the bronchi contained a tenacious dull mucus. There was a slight fibrinous effusion of pericarditis. The heart was of good size; the left ventricle was somewhat *too thick;* the mitral valve a little ossified, and also the aortic crescents, which were only two, but seemed to act well. The ascending aorta was *dilated.* The end of the arch (close above the ductus arteriosus) presented a fine simple *annulus,* which would not admit the little finger. The great arteries of the arch were not large. To the right of the constriction, the aorta was decidedly narrow and thin, and beyond it rather bulbous, thick, and atheromatous; one or two intercostal arteries seemed wide and unequally thick. The liver was enlarged, and close textured; a calculus obstructed the neck of the gall-bladder; the spleen was large and fleshy; the kidneys were somewhat mottled, and their tubuli contained sabulous matter.—*London and Edinburgh Monthly Medical Journal.*

IRIDEREMIA.

Mr. France has published a case of absence of the iris in both eyes, in the person of a young woman, an out-patient at the eye infirmary at Guy's. She is unable to bear exposure to a strong light; sunshine in particular is disagreeable to her, and causes profuse lacrymation. Objects are only distinctly seen when within the distance of a foot or two. The eyelids are habitually more than half closed; the globe of each

eye affected with an almost incessant oscillatory motion in a horizontal direction, and the power of directing the eye towards an object, particularly upwards or downwards, is much impaired. The corneæ are partially clouded. "The sclerotic coats are moderately healthy—perhaps rather more blueish than natural; their degree of tension is that of health. On inspecting the right eye very carefully, and looking above or beside the corneal nebula, there is observed a central opacity of the anterior capsule of the crystalline, about the size of a large pin's head; and a similar spot is also to be seen on the posterior capsule, the lens remaining perfectly transparent. Thus a very satisfactory illustration is afforded of the size of the space between the cornea and capsule; and, again, between the front and back walls of the cavity within which the lens is contained. In the left eye, the centre of the anterior capsule, or more superficial parts of the lens, is opaque; while the posterior, appearing as if corrugated, is opaque also in the centre, to about one-third of its extent, and shoots forwards, as it were, flakes of opacity into the lens on the nasal side.

"With these exceptions, the entire space viewed through either cornea is of uniform brownish black hue. The closest examination does not disclose any vestige of iris."

Of this singular malformation, Lawrence has seen two examples in children, Middlemore one. Von Ammon, of Dresden, has depicted several. He says, in describing them, that the sclerotic coats have been invariably found free from blueish tinge, and decidedly white—that the condition of the lids is always, or generally, that noticed above—that cataract always sooner or later occurs, and should not be interfered with, and that sometimes this malformation has displayed the strongest disposition to hereditary transmission. Oscillation of the globe also seems to be very frequent.—*Guy's Hospital Reports*, April, 1842.

STATISTICS OF DISLOCATIONS.

M. Malgaigne has examined the registers of the Hôtel-Dieu, and has ascertained that out of 229 cases, 1 occurred between 2 and 5 years, 4 between 5 and 10, 8 between 10 and 15, 29 between 15 and 20, 32 between 20 to 25, 40 between 25 and 30, 48 between 30 and 35, 38 between 35 and 40, 45 between 40 and 45, 51 between 45 and 50, 52 between 50 and 55, 51 between 55 and 60, 51 between 60 and 65, 42 between 65 and 70, 19 between 70 and 75, 13 between 75 and 80, 4 between 80 and 90, 1 at 90.

Luxations, then, are rare in early infancy, and rather more frequent towards puberty, at which period they suddenly increase greatly in number; this continues to enlarge up to the fiftieth year, and then, contrary to the general opinion, it remains stationary for the next fifteen years. M. Malgaigne says that the proportion of dislocations between the sexes as 2.92 men to 1 woman.—*Examinateur Médical.*

DISEASES OF THE SPLEEN.

1. Enlargements of the spleen. The enlargements sometimes are to a very great extent, the spleen weighing ten or twelve pounds, and yet no sensible alteration can be detected in its substance by the unassisted eye. Frequently, however, its structure is at the same time much changed, its colour being much deeper, its consistence greatly diminished, and it rendered more friable, so as scarcely to admit of examination without falling to pieces. Its external membrane is also often torn with ease; sometimes it is thickened, more vascular, and occasionally cartilaginous in parts. 2. It is in some cases ossified in various places, and in others covered with large patches of coagulable lymph and albuminous concretions. In such cases it frequently adheres to the adjoining surfaces and viscera. 3. Its internal structure frequently contains purulent collections, sometimes apparently unencysted, and flowing through its substance; at others, enclosed in one or more distinct cysts. It is also subject to tubercular formations, and to hydatids. 4. The spleen is sometimes found smaller than natural, and dry and shrivelled; but this is comparatively a rare occurrence in warm climates. 5. Instances have occurred wherein it has been ruptured from the congestion of blood, to which it has been subject in the cold stage of an ague. 6. Its internal substance has been found reduced to a grumous and pultaceous mass.—*Annesley on Diseases of India.*

TREATMENT OF PROLAPSUS RECTI BY THE ACTUAL CAUTERY.

A lady, 50 years of age, suffered from enormous dilatation of the anus, with a permanent, hard, and very painful prolapsus, insomuch that she could not remain in any other than the recumbent position. M. Begin, who was called in, determined to apply iron at a white heat, as the only means of destroying the projecting portion, and contracting the enlarged opening. The patient was placed on her right side, the nates projecting beyond the edge of the bed, the left thigh flexed, the right extended, and was supported in that position by assistants, by whom the right nates was raised. As much of the prolapsus as possible was returned, leaving only the indurated and fleshy portion externally. Three applications of the actual cautery were made, the shape of the first and second instruments used not admitting of the parts being fully cauterised; a dry, brownish eschar formed, and the patient suffered less than she expected. Cold water applications were at first had recourse to. On the fifth day suppuration commenced, and the sloughs began to separate. At a month's end there were not any traces either of the disease or the operation—the anus would scarcely permit the entrance of the finger. The same operation was successful in another case of a similar character.—*Archives Générales de Médécine.*

LIGHTNING RODS.

At a recent lecture delivered at the Royal Institution, Mr. Faraday stated that metals did not form perfect conductors of electricity, their substance, in fact, tending to obstruct the passage of the fluid. Conducting rods, unless great care was taken in their construction, might prove far more injurious than useful, as, if there were other conducting agents near, and *not absolutely connected with the rod*, mischief might result from the lateral spark. An electrician, therefore, would always see that leaden gutters, roofs, &c., are connected with the rod destined to convey the electricity into the ground.

A CORONER'S KIT.

One of the coroners for the county of Dublin was brought up yesterday before the magistrates of the head police-office, Dublin, charged with being drunk and disorderly, at half-past five o'clock on Monday, in Camden-street, and assaulting police constable 104 A. On being brought to the station-house and searched, the following articles were found in his possession, as detailed by the constable on the sheet which contained the charge:—A prayer-book, a pack of cards, a pair of spectacles, a bottle of whiskey, a tin box containing some sugar, a tin tea-pot and saucepan, a pair of scissors, two knives, a chain and seal, a razor, three shillings and threepence-halfpenny, also a penny, a chain and seal, some bread and butter, one shilling and a penny in copper, a corkscrew, a rule, three small boxes, a hammer, a pepper-box, a comb, two locks, a key, a bottle, some nails, some steel pens, some tea, a gimlet, two ink-bottles, and some tape, a fourpence in silver, and some soap, a stick—in his pocket. The entry in the sheet is, "Fined the county coroner one shilling.—J. Magee."—*Freeman's Journal.*

PROSPECTS OF THE MEDICAL PROFESSION.

Those who look only upon the surface of society, and who hear of the large fortunes accumulated by a few successful medical practitioners, may think that the practice of the medical profession is at once the sure and ready road to independence and wealth; but the *appalling fact*, that ONE IN FOUR of the members of this society has left a widow or orphans claimants on its funds, sufficiently disproves this opinion. The public generally seem not to have any knowledge of the difficulties, and consequently no sympathy for the struggles, of men who, bred with the notions and feelings of gentlemen, educated at a great expense, and obliged at all hazards to keep up an appearance of respectability, are compelled to wait quietly and silently for that employment which they either may not obtain at all, or too late in life to afford them the opportunity of providing for their families.—*Report of the Society for the Relief of Widows and Orphans of Medical Men.*

ORGANIC PETRIFACTIONS.

A young physician of Rome, says a letter from that city, has succeeded in discovering the means of petrifying all substances of organic formation, without their being changed materially in colour. A few days are sufficient to operate this transformation. He has already exhibited flowers, birds, fishes, and even human heads, beautifully petrified.—*Athenæum.*

PROMOTIONS AND APPOINTMENTS.

War-office, April 15.

14th Light Dragoons—Arthur Saunders Thomson, M.D., to be assistant-surgeon, vice Moffatt, promoted.

17th Foot—Robert Winchester Fraser, Esq., to be assistant-surgeon, vice Thomson, appointed to the 14th Dragoons.

57th Foot—Joseph Jee, Esq., to be assistant-surgeon, vice Fraser, who resigns.

42nd Foot—Charles Bush Hearn, Esq., to be assistant-surgeon, vice Baird, promoted.

OBITUARY.

At Calcutta, on the 12th instant, John Bourchier, M.D., of the Bombay Medical Service.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted on Friday, April 15, 1842.

John Deakin, William James Hill, William Carter, Otho Edward Henry Wucherer, Henry Freeland Carter, Maurice Thomas West, Slyman Michell.

Monday, April 18, 1842.

David Morgan, John Serjeant, William N. Boyce, Edward Gaskell, William N. Clarkson, William Grey, William Player, Thomas B. Gildersleeves, Benjamin Barkus, John Nicholson, Duncan R. Mc Nab, Thomas E. Lander, Samuel Mason.

APOTHECARIES' HALL.

Licentiates admitted April 7, 1842.

L. Buckell, Chichester; S. Barnett, Stourport; T. Swain, W. Shacklock, Leeds; J. Humpage, Bristol; J. N. Greensill, Hurtlebury.

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The communications of *Mr. Peacock, Mr. Bulley, Dr. Jeffreys, Dr. Wollam,* and several other correspondents, shall appear in our next number.

New members of the Provincial Association can have the back numbers to Jan. 1, 1842, by forwarding to us the name of a *country* bookseller through whom they may be sent.

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COURSE OF CLINICAL LECTURES ON SURGICAL DISEASES,

DELIVERED AT THE HOSPITAL OF LA CHARITÉ,

By Professor Velpeau.

Lecture XIX.—(Continued.)

DISEASES OF THE BREAST.

Inflammation of the Mammary Gland.

Many writers confound, under the general name of parenchymatous inflammation of the breast, various inflammatory affections of that organ. Nearly all of them, however, are connected with lactation. They may be distinguished into three varieties—inflammation of the secretory canals, of the lobules, or of the fibro-cellular membrane.

1. *Inflammation of the Secretory Canals.*—When the secretion of the mammary gland collects in the ducts and distends them, the patient often experiences severe pain, with more or less general fever; this occurs during the last months of pregnancy, in puerperal women and in nurses. The retention of milk does not constitute a state of true inflammation, but it may often give rise to the latter disease.

The following are the symptoms by which it is characterised:—The mammary gland becomes tumefied, and irregularly knotted; the skin is warm, red, and very sensitive; but occasionally the colour is paler than natural. The patient often says that she feels as if the breast were pierced with a number of pins. There is always a certain degree of fever, and the appetite is lost. In some cases the whole gland is involved; in others the congestion is confined to certain points, and gives rise to knotty indurations, which have been mistaken for malignant tumours. The causes of this affection are cold, an excessive secretion and retention of milk, and occasionally it supervenes on some internal disease. If left to itself, the congestion may disappear without exciting inflammation; in other cases the secretory canals become irritated, and inflame, and the inflammation may extend from them to the substance of the gland.

Treatment.—Simple congestion of the lactiferous canals should be distinguished from the form which is accompanied by inflammation. In the former case our first care should be to give exit to the milk either by natural or artificial means. The woman should be directed to give her child the breast more frequently; and if this be not sufficient, the aid of an adult person, &c., must be sought. If these simple means fail, we must have recourse to others. The liniment recommended by M. Ranque, and composed of laurel-water, extract of belladonna, and æther, will be found useful; or that recommended by Sir A. Cooper, and made of camphor, oil, and ammonia, may be employed. You must, however, understand clearly that topical applications of this kind are only proper in cases of simple congestion; where any inflammation exists they would be hurtful. The liniment which I am in the habit of using is composed of a drachm of ammonia and half a drachm of camphor, mixed with the yolks of a couple of eggs. When inflammation exists, we must, as I said before, have recourse to general and local means, of which I shall presently speak.

Inflammation of the Glandular Substance and Fibro-cellular Tissue.—This form is almost exclusively found in nurses; I have seen it, however, occasionally in pregnant women. In the early stage the skin of the breast is barely red; the tumefaction is inconsiderable; there is some dull, deep, wandering pain here and there in the gland, and on pressing it between the fingers we find some points of irregular induration. The integuments soon become red, the gland enlarges, the pain is very severe and lancinating, and is chiefly felt around the areola. The progress of this form of inflammation is generally less rapid than either of those already noticed; this depends on the structure of the parts. As the tissue of the gland is connected in front with the adipose tissue, and behind with the cellular, the disease is often complicated with superficial or deep-seated inflammations.

Treatment.—When this affection attacks pregnant women, or puerperal females who are unable or unwilling to nurse, we must give up the idea of evacuating the milk, and be content with attempting to diminish the quantity secreted. Blood must be drawn from the arm, in proportion to the violence of the inflammation and the constitution of the patient. I think it better to take away small quantities at short intervals than to bleed freely. Leeches are also to be applied on or around the breast. Saline purgatives, baths, emollient lotions, &c. &c., must also be employed. One of the most efficacious means that we can employ is regular compression of the breast; but this should never be applied except by an experienced hand.

Should the patient be nursing at the time of attack, the first question which presents itself to us is, should she continue to nurse? In the majority of cases, especially if the inflammation be violent, the child should be removed from the breast; when the milk collects in too great quantity, it may be removed artificially; as soon as the inflammation has been somewhat subdued, the infant may be applied to the breast again. The breast should be covered with a large poultice, and the bowels moderately acted on; but unless absolutely requisite, you must not have recourse to abstraction of blood or active purgation.

Abscess of the Breast.

Abscess of the breast, whether acute or chronic,

may be distinguished into three varieties, like the inflammations from which they commonly result.

Superficial Abscess.—Superficial abscess of the breast may occupy either the areola or the adipose tissue. When inflammation of the areola terminates in suppuration, we observe a number of small abscesses, of a globular form, and varying from the size of a nut to that of a small egg. They are in general very circumscribed, extremely painful, and covered with a blueish or livid integument. It is often very difficult to detect fluctuation in them. The best way is to compress the whole of the gland transversely with the left hand, and with the index finger of the right hand explore the small tumours. After a little practice you will be able to distinguish them readily from simple dilatation of the lactiferous tubes, and the irregularities of surface which naturally exist in some patients. When the nipple is sound, and when we have no reason to think that the secretory ducts are implicated, it is unnecessary to withdraw the infant from the breast. As the abscess often depends on irritation, fissure, excoriation, &c., of the nipple and areola, you must, of course, remove the exciting cause. This done, it remains for you to decide whether you will open the abscess or leave the case to nature. In many instances, it is true, the abscess will open of itself, and heal up well; still I am convinced that they should be opened as soon as ever fluctuation is detected; a large, free opening should be made, and I would sooner run the risk of pushing my lancet into a solid tumour, than leave one of these abscesses to open of itself. When the matter has been discharged, simple poultices are all that is requisite.

Abscess of the Adipose Tissue.—The areolar texture of the tissue in which the abscesses are seated explains why they are always circumscribed, and often numerous; I have seen as many as six in a woman attacked with erysipelas; each was as large as a walnut. In another case there were four, resulting from erythema nodosum. When this species of abscess is single, it often acquires considerable size; I have seen them as large as an orange or a doubled fist; they commonly occupy the lower and outer part of the mamma. The existence of an abscess of this kind is made known by the projection, thinness, and livid colour of the skin; it is easy to distinguish fluctuation in the tumour, and to perceive that it does not occupy either the substance of the gland or the sub-mammary cellular tissue. The species of abscess of which I now speak is hardly ever absorbed; they generally open before the fifteenth day, but sometimes not before a month.

Treatment.—As the mammary gland is not involved, it is evidently unnecessary to remove the infant from the breast; indeed, the irritation would only be increased by the accumulation of milk. You must open the abscess freely as soon as you perceive any sign of fluctuation. Some surgeons advise us to wait until suppuration is completely established, but I cannot adopt this opinion; such a practice exposes to the risk of extensive separation and destruction of the integuments. When the tumour is large, and the skin very thin, or if several sinuses have formed, you must make several incisions; large poultices are then to be placed over the breast, until the abscess is completely emptied, when you may apply any simple dressing. The congestion and induration round the abscess is best combatted by pressure. In some cases the discharge of pus will continue for a considerable time, and the skin assumes an unhealthy, unfavourable appearance; here you must have recourse to stimulating injections, of which I shall speak presently.

When the patient, as often happens, refuses to permit you to use the knife, some benefit will be derived from large blisters. I have tried these, in private practice, with the best effects, and have succeeded in causing the absorption of large abscesses. When the blister fails to promote resolution, it has the advantage of hastening the process of suppuration.

This latter is marked by irregular rigors and partial sweats; the affected breast becomes heavy and distended, the skin smooth and slightly hot. If you press the gland, it seems as if it rested on a bladder full of fluid, and gives a feeling quite different from that of superficial or glandular abscess. I must confess, however, that when the abscess is small, it is not easy to discover fluctuation; your diagnosis must then rest on the history of the case. For example, if the symptoms which I have already mentioned, when speaking of deep-seated inflammation, exist for eight or ten days, and are followed by a diminution of pain, and redness of the skin, and fever, while the tumefaction continues, and the breast has a doughy feel, then there is little doubt of the existence of abscess. They sometimes acquire a very great size in a short time; I have seen several which contained nearly two quarts of pus.

Treatment.—The only rational and efficacious mode of treatment consists in opening the abscess as soon as the presence of fluctuation has been established. If the abscess be circumscribed behind the gland, and does not present in front, you must open it at the most depending point; the incision should be free, and made in a perpendicular direction. Should the abscess point in different places, you must open it at each place. Generally speaking, the case will proceed favourably, as soon as the matter is evacuated; but should a week pass over, and the abscess continue to discharge, you must have recourse to graduated pressure. So far the treatment is simple enough; but the case is different when the pus has penetrated through the substance of the mamma at different points, and formed several abscesses on its surface. This constitutes a very formidable variety of the disease, and one which requires a considerable time for its cure. The best practice is, undoubtedly, to divide the different sinuses freely, down to the main collection of matter underneath the gland. Mr. Hey recommended this practice, and I think that it is often the only one that will produce any beneficial results, although Sir A. Cooper is of a different opinion. You must not, however, have recourse to so severe a measure at first, but wait the effect of small punctures. When these fail, you may pass a grooved director through one of the sinuses to the bottom of the abscess, and divide the mamma with a single stroke of the knife; the finger is then introduced into the other sinuses, and guides the instrument by which they are laid open. A bit of lint is then placed between the edges of the wound, to prevent it from uniting too soon. Some patients will not submit to this treatment, and many surgeons will not be disposed

to adopt it; the common incisions must then be made, but the disease will thus continue for a length of time.

M. Jules Cloquet has proposed to allow a large gum-elastic catheter to remain in the sinus, and says that he has found this method very useful. It will, however, frequently fail. Whatever method we employ, the abscess will remain stationary after a certain time. You must then have recourse to compression, but if the latter do not produce evident benefit within a few days, and the edges of the incisions become flaccid and ill-conditioned, you must abandon it, and inject the decoction of bark, or a weak solution of tincture of iodine, or the sulphuric acid injection, recommended by Sir A. Cooper. For the treatment of deep-seated abscess of the breast, a great variety of means have been employed internally; but I shall speak only of those which have been sanctioned by experience, and which I have tried myself. The following is the result of experiments made by me, with the different methods of treatment:—Several patients were treated by simple purgatives, repeated frequently, during a period of ten to twenty days; in other cases I tried emetics, or emetico-cathartic remedies. Others, again, were treated with the tincture of colchicum, in the dose of one to two drachms during the day; others with the tincture of iodine, or iodine baths, or calomel, in various doses. The conclusion to which I come is, that no remedy, taken singly, merits the encomiums bestowed upon it by certain practitioners. Tartar emetic, in small or large doses, has been recommended by MM. Kennedy, Beatty, and Lever, in England. I administered four, six, eight, ten grains of tartar emetic, by spoonfuls, in the twenty-four hours, to several patients, but, as you must have observed, the effects were far from being so favourable as those announced by the English practitioners; the emetic was continued from three to eight days, without influencing the progress of the disease.

Glandular Abscess.—There are two species of glandular abscess of the mamma. In one variety the disease commences in the lactiferous canals; hence we usually observe this form in nurses and puerperal women, but it may occur at the critical age. It often commences with retention of the milk; the distended canal is irritated, inflames, and becomes converted into a cyst furnishing pus. In the second species the inflammation commences in the cellular tissue of the gland. Several of these abscesses commonly exist at the same time, and they are small; I have seen thirty-three of them in the same gland. In rare cases, however, the abscess is single, and extends round the nipple. Glandular abscess, Gentlemen, is by far the most frequent form that we meet with in practice; indeed, we may say that they are the origin of almost every abscess observed in nurses, pregnant and puerperal women, except those depending on external injuries. The disease is evidently connected with the secretion of milk; and hence you may ask if these abscesses are more frequent in women who suckle than in women who do not. Many writers pretend that suckling the infant acts as a preservative against this species of abscess. This I think is a manifest error; experience proves that nurses are much more frequently attacked by mammary abscess than women who do not nurse. In the latter the breast ceases to secrete much milk in eight to fourteen days, and is thus withdrawn from a source of constant irritation; but nurses are subject to an exciting cause of abscess during ten to fifteen months.

The distinguishing signs of parenchymatous abscess of the breast are not easily discovered. In the commencement the whole breast is swollen, and the seat of deep, lancinating pain; in six to twelve days afterwards various knotty tumours are felt in the substance of the gland, and at a later period some of these tumours soften; the usual seat of the abscess is round the areola.

The progress of this species of abscess is much slower than that of either of the two already described; in their *treatment*, your first care must be to suspend the process of suckling; the milk is always mixed with pus, and unfit for the nourishment of the infant. As I have said, the superficial and deep-seated abscesses require to be opened freely, but you cannot employ the same measure here; when the abscess shows evident signs of fluctuation, it may be opened by a small incision or puncture, except in cases of very extensive abscess, where the opening must be proportionately free. A piece of lint must then be placed between the edges of the incision, and emollient poultices applied. Afterwards, when the abscess becomes chronic, and this often occurs, you must have recourse to methodical compression. The local treatment will, in most cases, require the aid of general means, for this species of abscess is peculiarly obstinate. You must, therefore, endeavour to suspend the secretion of milk by appropriate remedies. For this purpose you may try preparations of iodine, small doses of calomel, purgatives, or tartar emetic. When the secretion of milk has been suspended, your local remedies will act with increased force, and a cure is soon obtained.

CASE OF FRACTURE OF THE NECK OF THE THIGH-BONE.

By F. A. Bulley, Esq.,

Surgeon to the Royal Berkshire Hospital, Reading.

Thomas Cripps, aged 79, a poor man who gained his livelihood by thatching, was admitted into the Royal Berkshire Hospital, on Friday, March 25, in consequence of his having received an injury from a fall from a ladder, while working at his trade. From what I could understand from the persons who brought him, it seemed that he had fallen from a considerable height upon his left side, striking the prominence of the trochanter major upon some pebble pavement underneath the outhouse, the roof of which he had been repairing. Considering his advanced age he was a healthy-looking man, and, as far as I could ascertain, he had never (beyond occasional attacks of rheumatism from exposure to weather) been subject to any material illness, and he had lived a very temperate, and, indeed, abstemious life. The accident had happened on the previous Tuesday, but owing to the prejudice of his friends, and his own supposition that the injury was not so severe as to require much assistance, this delay of four days occurred before it

was thought necessary to procure his admission into the hospital.

On examination, the following appearances of injury presented themselves. He was, and had been, from the time of the receipt of the accident, unable to bear upon the affected limb, the attempt to do so causing intolerable pain. He could, however, with the assistance of his hands in lifting it, flex it to a considerable extent upon the trunk, while lying on his back in bed, without experiencing any particular uneasiness in the part. The affected limb had become shortened to the extent of about an inch, and was everted, but it was easily rolled inwards into its natural position. It was, however, impossible, or at least difficult, without great violence, to extend the limb so as to make it appear of the same length as the other sound one. There was an extensive ecchymosis of the integument round the joint, involving the skin of the nates and scrotum, of an extremely dark purple colour, like what is usually observed to follow sprains in very old persons. The limb could be rotated to some extent, both inwards and outwards, without much pain; this latter movement producing a grating or rubbing sensation, but very indistinct, and not at all resembling the feeling of crepitus commonly discernible in fractures of the neck of the bone. On pressing rather strongly with the fingers upon the posterior part of the trochanter major, a movement, as if this posterior portion of the trochanter had been detached from the shaft of the femur, was perceptible when the limb was in a quiescent state, but when it was flexed, or rotated, this feeling was not communicated, but only the dull rubbing or grinding sensation which I have described.

On account of the existing ecchymosis, and some little pain which the examination had produced, the limb was at first laid upon pillows in a flexed position, and allowed to remain so for two or three days; I then (the pain having left him) thought that I might use with advantage an apparatus constructed on the same principle as Boyer's, with an endless screw, having a foot piece or shoe working upon it for the purpose of keeping up permanent extension; but as I found it was utterly impossible, by any mechanical means, to draw out the shortened limb to its natural length, without injurious compression of the perineum by the padded girth, and as he felt otherwise very uneasy from its application, it was relinquished, and Amesbury's double-inclined plane was substituted in its stead; he, however, soon became weary even of this, and he was ultimately placed, without any restriction of the limb (with the exception of firmly binding it to the other to prevent eversion), upon one of the double-inclined plane beds of the hospital, with which he expressed himself as quite satisfied, and felt comfortable and easy.

April 8. He has remained upon the inclined plane bed, since the last report, without any more constraint upon the fractured limb than has been mentioned. There is now no pain or uneasiness in the situation of the fracture, and he says that he can flex the limb with the assistance of his hands to a considerable extent. He has done this, however, contrary to my express wishes, but still thinking that his inability to stand arose only from one of his old attacks of rheumatism, he prided himself on his fancied improvement, and had constantly amused himself by bending and extending his leg in this manner; I have mentioned this, to show the small amount of pain which attended the serious injury which was afterwards found to have occurred to the bone.

9. On visiting him this morning, I found that he had been attacked last evening with symptoms of bronchial inflammation and diarrhœa. He had had some wandering in his sleep, and was very feverish this morning and delirious, and had a drooping dispirited appearance, with a constant rattling cough; some medicines were ordered, which slightly relieved these symptoms, but towards evening he became worse, and he passed a restless feverish night.

11. On visiting the hospital this morning, I found that he died a short time before my arrival, his symptoms having continued to increase since I had seen him the evening before.

Post-mortem Examination of the Limb.—The subcutaneous ecchymosis had disappeared before his death, but a considerable quantity of blood had remained diffused among the muscles surrounding the fractured portion of the bone. The capsular ligament was entire, but it was somewhat thicker than natural, owing probably to the effects of the rheumatic inflammation in the joint to which he had been subject. On cutting through the capsule, the neck of the bone, which was somewhat thicker and shorter than common, was found to be uninjured, the fracture not having in the slightest degree encroached upon this portion of the bone. The head and cervix of the bone had been obliquely separated from the shaft, just at the root of the trochanter minor, and had passed downwards into the cancellous structure of the bone, which they were enabled to do, owing to the posterior portion of the trochanter major having been broken off, opening as it were to receive them.

The fracture of the trochanter major commenced exactly in the centre of its upper part, and, passing downwards through the length of the trochanter, the fissure wound inwards, and terminated at a little distance below the trochanter minor, which was included in the fractured piece.

It was the movement of this portion of the bone, which I felt during the lifetime of the patient, when I pressed my fingers strongly on the posterior part of the trochanter, while the limb was still and straight, but which was not observed when it was flexed, owing, as I now found, to the fractured neck passing (when flexure was attempted after death) lower down into the cancellous structure, and wedging out, and making immovable, this fractured portion, the movement of which was before so clearly distinguished.

On partially removing the fractured portion of the bone, the cancellous structure was found to have been hollowed out, as if by the attrition of the fractured neck within it, which had been caused by the patient injudiciously moving the limb, which had at the same time interrupted the reparative process, and a complete hollow had been formed at this part. The spongy texture itself was not more vascular than is commonly seen after a fracture has occurred a few days. The outer shell of the bone was, however, remarkably thin, and the medullary cavity, for some distance down the shaft, was somewhat larger than is usual in persons even of a very advanced age.

I could now discover what had prevented the extension of the limb; owing to this excavated condition of the cancellated interior of the bone, the upper and fore part of the trochanter major, which had not been broken, had been drawn inwards by the muscles inserted at its root, and had closed upon the end of the fractured neck after it had passed downwards, below it, and on endeavouring to extend the limb after death, the neck of the bone catching under this firm portion of the trochanter prevented the extension of the limb, and I found that I was unable, even after the muscles were removed, to cause the trochanter to pass over the fractured end of the cervix without applying more force than would have been justifiable in the lifetime of the patient. The thorax was not examined.

REMARKS.

I have recorded the foregoing case, as I thought it illustrative of a species of fracture of the femur which has not often been noticed by surgical writers. Sir Astley Cooper, in his admirable work on Fractures, mentions a somewhat similar one, and from what I can make out from his remarks, it was considered at the time he wrote to be of a very unusual character. The case in question had been under the care of Mr. Travers, in St. Thomas's Hospital, who, after the death of the patient, sent Sir A. Cooper the preparation of the parts, of which Sir A. C. speaks as follows:—"Mr. Travers having sent me the bone, the following are the appearances of this curious case:—The head and cervix had been separated from the trochanter major and body of the bone. The upper part of the thigh bone was obliquely split, so as to receive the cervix femoris into the cancelli. This fracture of the thigh bone separated the posterior portion of the trochanter major from the body of the thigh bone, and the trochanter minor was removed with it. An union had taken place between the fractured portions of the trochanter at a slight distance from each other, and thus a hollow was left, into which the cervix femoris was received, and it had not yet become united by ossific deposit, as the man had not lived sufficiently long for firm consolidation under his reduced state, for upon maceration, the neck of the bone had free play in the cavity in which it had been received, and from which it could not be removed."

Thus far, with the exception of the partial union which had taken place in the instance related by this distinguished observe , and the difference of the age of the patient, these cases closely resemble each other.

Sir A. Cooper relates two or three other cases, but, as they were complicated with fracture of the neck of the bone, and so far materially differ, it is unnecessary to refer to them here.

There are two or three circumstances in the case I have detailed which may not be considered as entirely void of interest. There can be no doubt, I think, that the fracture was occasioned by a direct force acting immediately upon the posterior portion of the trochanter major. The detachment or splitting off of this portion of the bone, through the direct medium of the blow, would, by suddenly breaking up the connection of the greater part of the cervix with the shaft, deprive the neck of the bone of its support, and allow it to pass into the cancellous structure, which would naturally open to receive it. A shortening of the limb would therefore immediately take place, principally through the action of the muscles, which would now act upon the unsupported limb, and draw the lower portion of the bone over the truncated and somewhat pointed end of the neck, the fractured portion of the shaft opening, as I have said before, to receive it; and it might also be occasioned in a measure by any injudicious attempts of the patient to walk upon the limb after the accident. With regard to the frequency of this particular accident, I am of opinion that it happens much more often in males, from the application of a direct force, than is generally supposed, and although my experience is limited, I believe, from what I have had an opportunity of observing, that some of those cases which have been considered as cases of bony union of the neck of the femur in men, have been in reality nothing more than modifications of cases of this description, circumstances and the prejudices against post-mortem inquiries preventing the discovery of the truth. These remarks do not apply to the neck of the bone in women, who, from the difference in the natural figure of the bone, may be considered more liable to fractures of this part than to the particular kind of fracture I have described, which, I believe, rarely happens to females, except from direct violence. I have, however, a case under my care at this time, which I consider of a somewhat similar character, in an elderly lady, who fell down while crossing her drawing-room, and struck her hip upon the floor. A shortening of the limb was the result, which it seemed almost impossible to overcome. But I felt an indistinct movement of the cervix, with eversion and all the general symptoms of fracture of some portion of the bone detached from the shaft, as I pressed upon it strongly with my fingers, without moving the limb. The limb was placed in a straight position. Circumstances connected with her general health, and some degree of concussion of the spine, which simultaneously occurred, were not favourable to the cure at first, but now, nine weeks from the receipt of the accident, she has recovered a tolerably strong voluntary movement of the limb, and I have every reason to believe partial consolidation has occurred; the condition of the spine, however, will, I fear, prevent her rising from her bed again, so as to enable me to judge whether consolidation has so far progressed as to allow her to stand upon the limb, but my impression is, that the union is now almost complete.

With regard to the diagnosis of this accident—with the exception of the sensation of movement of the fractured portion of the trochanter on firm pressure—the signs and appearances differ but little from those observed in what is commonly called fracture of the neck of the bone within the capsule. The shortening and eversion are the same, perhaps there is a little more pain on rotation outwards, because the action of rotating the sound shaft of the bone would tend to separate it from the fractured portion, which could not of course move with it, and thus pain would be produced; it must also be considered that the part is more surrounded by muscles, and nervous filaments abound in the neighbourhood of the fractured ends of the bone, which is not immediately the case in fracture of the cervix. There was apparently, however, not much pain in the case I have described; but he was a

man of dull sensibility, and moreover very courageous, so that I could not, in fact, ascertain the actual amount of pain he suffered, which was, I think, greater than it seemed.

In respect of the treatment, I am disposed to think that the straight position would be the best adapted to ensure consolidation. I found after death, when I attempted to flex the limb, that this movement occasioned the end of the cervix to pass farther down into the cancellous structure of the bone, and it is obvious on reflection that such would be the case mechanically, and it must be understood that the double inclined plane bed, on which I placed the patient, was so arranged as to render his position very little different from the straight one, which I consider to be the best. Eversion of the limb should be of course prevented. Lastly, in considering what was the proximate cause of the patient's death, it was clear that it was not the direct result of the accident, although the shock produced upon the system might go far to hasten it in so old a man, and I believe that death not unfrequently follows these injuries. But the injury did not seem to occasion so great a shock as I should have thought it might, and had it not been for the bronchitis, which I conceive to have been accidental, I believe that consolidation would have taken place, and I should not have had an opportunity, at least at present, of recording its result.

CASE
OF
UNUSUAL SLOWNESS OF PULSE,
WITH REMARKS.*

By T. B. Peacock,

Late House Surgeon of the Chester Infirmary, Pathologist to the Edinburgh Royal Infirmary.

The gentleman, who is the subject of this communication, first came under my notice in June, 1838; he was then 70 years of age, and enjoyed good health, with the exception of labouring under a remarkable slowness of pulse, of which he gave the following account: — He had attained the age of 60 without suffering from any serious indisposition, and had led a most active life, having been thirty-eight years in the army, and during a considerable portion of this time a non-commissioned officer in one of the regiments of guards, in which he performed the campaigns of the Peninsula, and was present at Waterloo. Since leaving the army, he had spent much of his time in the quieter kinds of field sports. About six years before the date of my seeing him, he was seized with an attack which was regarded as apoplectic by his medical attendant, for which he was bled with advantage; after this, his pulse was usually quicker than it had been when in health, and occasionally intermitted; he suffered from palpitation and uneasiness in the region of the heart, and a sensation which he described as a feeling of something rushing to the top of the head. About two years after the first appearance of these symptoms, he suddenly became faint while engaged in making some slight exertion, and fell down in a state of insensibility; on recovering his recollection, the feeling of faintness and langour was still felt, and continued some time, and he found his pulse beating only 25 to 30 times in the minute, a rate which, with little variation, it had retained for the last four years. I counted his pulse, and it beat steadily, and with perfect regularity, 28 times in the minute. This, he informed me, he regarded as the healthy standard. Occasionally, under the operation of depressing causes, as over fatigue by muscular exertion, it fell below that point, beating only 20 times, and on one occasion only 18 times in the minute; under these circumstances, the langour and feeling of rushing to the head and faintness came on; on the other hand, excitement of any kind, unusual bodily exertion, taking one or two glasses of wine, or, more frequently, mental excitement, gave rise to increased frequency of pulse, when it would beat 32 or 34, and this was uniformly attended with feeling of oppression and feverishness.

For three years after the change in the rate of his pulse, he was liable to occasional attacks of syncope; for the last twelve months he had, however, been free from them, and during the whole time had been in a pretty good state of health, and capable of taking an ordinary amount of exercise. His general appearance was that of a person of greater strength and activity than most at the same period of life, and though upwards of six feet in height, so far from being in any degree bent by age, his gait was remarkably erect.

My first impression, on feeling his pulse at the wrist, was, that the case would prove to be one of those described by Laennec, in which the alternate cardiac pulsations are so weak as not to be propagated to the distant arteries. On the hand being, however, applied over the region of the heart, its pulsations were found to correspond with those in the radial artery; the sounds of the heart did not present anything unusual, and were heard most distinctly between the sixth and seventh ribs; the first was short, and terminated rather abruptly by the second; the action of the heart was perfectly regular, and its impulse rather powerful, the pulse at the wrist being also not deficient in strength; percussion did not indicate any increased size of the organ, and was good over the rest of the thorax except on the right side, where the liver was found to advance considerably into the cavity of the chest. The respiration was natural as to frequency, and was performed with ease, except when he was engaged in unusual bodily exertion; no indications of any cerebral disease were present. In consequence of absence from home I did not again see him till 1840; during the interval, he informed me, he had but once suffered from an attack of faintness, after which he was left languid and oppressed, and incapable of much exertion for some time; with this exception, his health had been good, and he had been able to follow his usual occupations. His pulse I now found somewhat slower than before, beating only 26 times in the minute. On examination of the chest, the sounds of the heart were still natural, or nearly so, giving evidence of some degree of hypertrophy, with more or less dilatation of the left side, but with no valvular disease. On occasion of our first interview I had recommended the adoption of a moderately

* Read before the Royal Medical Society.

stimulating diet; latterly, however, he informed me that he had abstained almost entirely from fermented liquors, and he imagined with advantage; during his whole life he had, indeed, been very temperate. After this time I had not another opportunity of seeing him. He continued in his usual state of health till the following year, when he was suddenly seized with an attack of syncope, and expired—seven years after the remarkable slowness of pulse had first manifested itself. He was at this time residing at a distance, and no examination of the body took place.

My interest having been excited by this case, I was led to search for others of a similar description; with the exception, however, of several cases recorded in different periodical publications, I find the only account to be that contained in Mr. Mayo's paper, read before the Royal College of Physicians in 1838, and published in the "Medical Gazette" of the same year.

The cases detailed by Mr. Mayo are of two kinds—first, those in which the slowness of pulse was present from early life, or at least in which it was not known to have had at any former period a different rate; and secondly, those in which the pulse formerly beating at the ordinary standard suddenly fell to a lower average.

On the first class of cases I have no remarks to offer, bearing, as they do, but little analogy to the one related, and being, probably, not of very unfrequent occurrence. The examples given by Mr. Mayo are four in number; all occurred in males; two at the middle period of life, the other two in advanced age. The average of the pulse was in three from 30 to 40, and in one from 28 to 30. All seem to have possessed a fair share of health, and one was remarkable for his bodily activity.

The second division of cases are regarded by Mr. Mayo as dependant on lesion of the brain—general depression, exhaustion, and reduction of strength—sympathy with the digestive organs—or on atrophy of the heart, dependant on ossification of the coronary vessels, with or without passive dilatation.

The cases of slowness of the pulse, dependant on lesion of the brain, possess little interest, being of such frequent occurrence; the only case referred to by Mr. Mayo is that of Lord Liverpool. I may add that related by Mr. Holburton before the Medico-Chirurgical Society, in 1841, of a gentleman who laboured under peculiar fainting fits, with general slowness of pulse—the supposed result of injury to the medulla oblongata. The following are the particulars:—The patient, 64 years of age, sustained, in a fall from his horse, an injury to the back of the neck, the nature of which was not clearly understood. From this he recovered in the course of a year, with, however, the remains of some difficulty of moving the head. Two years after he was suddenly seized with a fainting fit, and while in this state his pulse beat only 20 times in the minute; the syncope returned at irregular intervals on any unusual excitement; his ordinary pulse was 32, but during the fits it fell to 12, 10, 9, 8, on three or four different occasions as low as 7. He died suddenly in one of those attacks five years and a quarter after the receipt of the injury. On examination, the medulla oblongata was found small and very firm, the antero-posterior diameter of the foramen magnum greatly diminished, the odontoid process pushed back, the occiput, atlas, and dentata firmly ossified together, and the canal so small as not to admit the little finger: the state of the heart was not ascertained. No paralytic symptoms had been present during life. The case related by Dr. Speers, in the 17th volume of Dr. Duncan's Medical Communications, was also regarded as dependant on disease of the brain. A man, 54 years of age, who had been drinking over night, was suddenly seized with a fainting fit in the street. When seen, his pulse beat only 24; he was perfectly collected, and complained of feeling of faintness; after this his pulse, in the intervals between the fits, varied from 21 to 26; when in them it occasionally fell to 10; stimulants would, however, then raise it to the former point, and give temporary relief to the faintness. On the second day he was so far recovered as to walk out to his workshop, but, on his return, was again seized with syncope, and the fits continued to recur till his death—nearly four days from the first attack. He was perfectly sensible to the last, but was observed during the last night not to move one arm and leg. Some gelatinous exudation was found on the surface of the hemispheres, and two ounces of fluid in the ventricles; his heart was healthy. The natural standard of his pulse at the time of attack was not ascertained, but three years before, when labouring under fever, it rose to 120, and on convalescence was 75.

In illustration of exhaustion being productive of slowness of pulse, Mr. Mayo quotes the case of a young lady who, in consequence of a neuralgic affection of the face and throat, was advised by her medical attendant to abstain from taking any food by the mouth; to this she submitted; nutritive enemata were administered twice or thrice a-day; in four days symptoms of fever supervened; and in fourteen the catamenia, which had been repressed for nine months, reappeared; the pulse was now between 70 and 80, but suddenly fell to 35; food was then cautiously given by the mouth, and she entirely recovered her strength, and the spasms were cured. The subsequent state of the pulse is not mentioned. A case, illustrating this form of the disease, fell under my notice about a twelvemonth ago. A patient, about 35 years of age, during convalescence from a severe attack of macculated fever, experienced a gradual reduction in the frequency of the pulse, till it fell to 45 and 40. At this point it continued several days, during which time his appetite was good, and he was able to leave his bed and take exercise in the ward, and latterly to go out into the garden. With the recovery of his strength the pulse again rose, and was of ordinary frequency at the time of his discharge from the hospital.

The next case related by Mr. Mayo is apparently regarded by him as one dependant on exhaustion, acting in combination with disorder of the digestive functions. A medical student had sat up for six nights successively, without taking rest in the day. At the end of that time he became feverish, free purging was had recourse to, and under its depressing influence his pulse fell to 35, at which point it continued two or three days; it then rose to 40, but did not attain the natural standard till after the lapse of many years. In the next two cases given by Mr.

Mayo, the heart was evidently the subject of organic disease. They are as follows:—A gentleman, 52 years of age, had threatenings of apoplexy, for which he was subjected to purging and a reduction of the free diet to which he had been accustomed. After this had been continued some time, he became subject to occasional attacks of faintness, during which his pulse fell from between 70 and 80, its former average, to 34, 30, and occasionally to 27. Under the use of a more stimulating regimen he gradually recovered his strength, but the pulse retained the same rate, and occasionally, under exposure to cold, or other depressing influences, it would sink to 24, and once to 21. He experienced hurried breathing on unusual exertion, had a bellows murmur with the systole of the heart, and at the earlier period of his illness the second sound could not be heard. After some time, however, it returned, and shortly before its reappearance a double beat of the heart took place for one pulsation at the wrist. The last case is very similar to the one just quoted. A medical gentleman, 59 years of age, had an attack of influenza, for which he had himself twice bled, and lost fifty ounces of blood. From the debility thus induced he did not recover for a twelvemonth, and soon after, on rising one morning, he experienced a sensation of faintness, and, on feeling his pulse, found it beating only between 30 and 40. The faintness soon went off, and his pulse rose to its former rate of 70. About a year after, the attack recurred under similar circumstances, and, though after continuing three or four weeks the pulse rose again, it never exceeded 68. He then continued free from any further attack till a year had elapsed, when his pulse again fell, and continued to beat only 33 in the minute, occasionally falling to 22. Sometimes, while in this state, the action of the heart was neither to be heard nor felt, and occasionally it was only to be seen beating on the right side; he suffered under a feeling of constriction of the chest, difficulty of breathing, especially on any exertion, and pain in the right arm; his complexion was nevertheless ruddy, his appetite good, and his powers of exertion considerable; the heart did not exhibit any sign of disease on physical examination, with the exception of beating over a somewhat larger space than usual.

Slowness of pulse, as existing in these cases, in connection with disease of the heart, is by no means rare. Of this an example is given by Mr. Worthington, in the volume of the "Lancet" for 1841. A gentleman, between forty and fifty years of age, whose pulse, in a state of health, beat 75 in the minute, became affected with shortness of breath, oppression at the chest, and prostration of strength, during which his pulse sank to 40, and occasionally to a lower average. The stroke of the heart was fuller than usual, but the sounds natural. The symptoms continued to increase for two or three years; and stimulants afforded temporary relief; he eventually sunk under a severe fit of dyspnœa, and, on examination, the heart was found embedded in fat, and its substance blanched and softened, so that the finger could readily be made to penetrate its texture. No other diseased appearances were detected. Mr. Worthington also refers to the case of a gentleman of 70, whose pulse had, three years before, fallen from its ordinary rate to 26. The action of the heart was extremely feeble, the impulse scarcely to be felt, and the period of time occupied by its pulsation scarcely exceeded that of the wrist. In the discussion on the case of Mr. Holburton, Dr. Addison mentioned a somewhat similar affection in a gentleman under his care. He was subject to a kind of epileptic fits, in which he became insensible, and his pulse beat only 20 or 24; from this it gradually rose to between 60 and 70, when it would stop entirely, and the fit come on. When it again begun to beat it was at the former rate, and in this state a double pulsation was often also observed, and a loud thumping and distinct bruit, the seat of which could not, however, be ascertained. He had no symptoms of head affection. Chomel had under his charge at la Charité, a young man labouring under disease of the heart, whose pulse ordinarily beat 28, and occasionally only 20 times in the minute. The only case which I have myself seen of remarkable slowness of pulse, dependant on disease of the heart, was that of a patient who died in the Royal Infirmary of a circumscribed aneurism of the base of the septum ventriculorum. The cardiac beats at the time of his admission, six months before death, were 44 in the minute, and, in the last period of his life, never exceeded 33 or 30, while, at the former low rate, the respirations were 34 in the minute.

The interest of these cases lies in the length of time during which the slowness of pulse continued, that symptom being, in the last stage of all cardiac diseases, of very frequent occurrence. From all these, however, the case I have related differs in presenting but very slight indications of disease of the heart, in having existed with so small an amount of general indisposition, and in the length of time during which it continued, while, with one or two exceptions, the rate of the pulse was much slower than in any of them. Unlike, also, the instances given by Mr. Mayo, and that of Mr. Worthington, stimulants, in whatever form exhibited, were uniformly attended with derangement of the general health—a feature in which it more nearly resembled the first division of Mr. Mayo's cases.

The adoption of any theory explanatory of the condition of the pulse in these cases is attended with considerable difficulty, owing to its occurring under such different circumstances—at one time being a temporary, at another a permanent condition—in one instance existing without any marked signs of cardiac disease, at another evidently combined with serious organic lesion.

Lesion of the brain, though often occasioning a similar condition of the pulse, may, however, be doubted to have given rise to the pecculiarity in the two cases quoted. The length of time which, in Mr. Holburton's case, had elapsed between the receipt of the injury and the development of the disease, and the absence of any paralytic symptoms throughout its course, render questionable the dependance of the fainting fits and slowness of pulse on the injury to the medulla oblongata. It must also be borne in mind that, as extensive contraction of a similar portion of the spinal canal has been found where no such symptoms existed during life, and where, indeed, the patient was able, till within a very short period of death, to follow his usual occupation. Of this, Dr. Handyside's case, in the "Edinburgh Medical and

Surgical Journal," affords a remarkable instance. In the case quoted from the Medical Communications, it is stated that two ounces of fluid existed in the ventricles; but it is extremely improbable that so large an amount should have accumulated in little more than three days, without giving rise to symptoms of compression. The simple presence of fluid in the ventricle cannot be regarded as a morbid state, Dr. Sims having shown that two, four, and even six ounces, may be found in persons dying of diseases in no way connected with the brain, and in whom no cerebral symptoms were present during life. In the former case it will be observed that the heart was not examined; and in the last, the statement that it was found healthy, when viewed in connection with the imperfect knowledge of its pathology at that period, is not altogether to be relied upon.

It may be doubted whether atrophy of the heart was present in the last two cases quoted by Mr. Mayo, that gentleman not having had an opportunity of verifying his opinion by dissection. Atrophy of the heart is described by writers on the diseases of that organ as of rare occurrence, except as an attendant on chronic diseases of debility; and of the few cases on record in which it has been found, and the patients were under observation during life, the symptoms were alone referable to the disease which led to the fatal event—a remark which applies to two cases under my own observation, in which the heart was remarkably small; a condition in these cases, probably congenital, being combined with a similar state of the brain. We possess, therefore, no accurate knowledge of the phenomena to which atrophy of the heart would give rise; and Laennec expresses his opinion that it cannot in any case be regarded as a disease; adding, however, that "several hypochondriacs, who were liable to faintings from very slight causes, gave, under the stethoscope, signs of a very small heart."

The only case I have found recorded, in which an examination of the body took place after the pulse had observed a very slow rate, and in which the condition of the heart is stated, is that of Mr. Worthington's patient, who lived two years and a half, and in whom the heart was found very much softened. On the contrary, in the case of aneurism of the heart, to which I have before referred, the substance of that organ, so far from being softened, was unusually firm; the left ventricle was also hypertrophied, and its cavity much larger than usual. There existed in this case, probably, some regurgitation through the aortic orifice, and the symptoms during life were chiefly those of valvular obstruction on the right side, from the pressure of the tumour. In Mr. Worthington's case, no valvular disease was found; but one of Mr. Mayo's, like that seen by myself, gave evidence of such disease.

It would, therefore, appear, that extreme slowness of pulse, though an occasional attendant on different forms of disease of the heart, is not a necessary feature in any, and, as the peculiar condition of that organ, essential to its production, is probably one of deficient power with the absence of excitement, it may be expected to attend the last stage of diseases which, at an earlier period, are of very different types. Deficiency of power and excitement, existing in a less degree, may be present in those cases in which, for one pulsation in the distant arteries, the heart is found to beat twice—a peculiar mode of action described by all writers of diseases of the heart, and of which examples are afforded in the preceding paper by one of the cases related by Mr. Mayo, and by that of Dr. Addison.

It is probable, also, that the same condition may occasionally be found with a powerful cardiac impulse, and strong pulse at the wrist—the heart, as it were, atoning, by one forcible effort, for the more frequent pulsations which, in a state of health, it should have performed.

Of those cases in which the pulse is found to assume a slow rate without any organic disease being present, and where it is only a temporary peculiarity, either dependant on exhaustion and prostration of strength, or, as occasionally happens, arising without any obvious reason, the imperfect state of our knowledge of the causes of the heart's action precludes our furnishing any decided explanation. It is, however, probable, that there may, in these cases, exist a loss of nervous energy in that organ, by which it is rendered less susceptible of the stimulus of the blood, and a deficiency of power and excitement is induced—a state similar to that which, in the former class of cases, results from advanced stages of organic disease.

Royal Infirmary, Edinburgh, April 13, 1842.

ALBUMINOUS URINE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I suspect that albumen exists in the human urine in many cases in which its presence escapes detection.

Inferring from analogy that it would be found in the urine of persons affected with *petechiæ sine febre*, although the urine might not contain any of the colouring matter of the blood, I resolved to investigate the matter on the first opportunity. Since last May I have had five cases under my care. In one, the urine was coffee-coloured, and deposited a brown powdery sediment, and coagulated both by heat and upon the addition of nitric acid. In the four other cases the urine appeared natural, and yet, in every one of them, the same tests proved the presence of a large quantity of albumen.

Again, analogy led me to suspect its presence in the urine of females who suddenly wean their infants at a time when they have a full supply of milk. I have since had the opportunity of testing urine under these circumstances in three cases; and in all the quantity of albumen was considerable.

In the petechial disease the urine becomes natural as the patient recovers; and in the cases of weaning, the quantity of albumen gradually diminishes as the milk disappears from the breasts.

I remain, Gentlemen,

Your obedient servant,

JONAS MALDEN, M.D.

Worcester, April 25, 1842.

CASE
OF
TRAUMATIC TETANUS,
SUCCESSFULLY TREATED BY
THE SESQUICARBONATE OF IRON.

By George Woollam, M.D.

W. B., aged 44, tall, muscular, of dark complexion, and rather irregular habits, a neighbouring farmer, in returning from market on March 29, 1840, fell, when a cart-wheel passed over his right hand. On the evening of the same day I was requested to visit him, and found the structures of the thumb much contused and lacerated. I continued to visit him until the 8th of April, when he came to my house to have the injured part dressed; and, as he was going on favourably, I saw no more of him until the 17th, at 9, a.m., when I was summoned to visit him; I found him lying on his left side, in a state, speaking in the language of the illustrious Cullen, of complete emprosthotonos, unable to turn, or even to move himself without assistance; deglutition was accomplished with extreme difficulty; the jaws were capable of being separated to such an extent as to admit of the introduction of a shallow spoon only between the teeth. The pulse was 108; pain in the epigastric region; a haggard appearance of countenance; a fixed prominent eye, with occasional profuse perspiration. On interrogating him regarding his absence from the 8th to the 17th, he replied, suffering excessive uneasiness from the mere effort of speaking, that he had been advised to betake himself to an old woman at Rotherham, who had treated him up to the latter date. On examining the wound, I found it covered with adhesive plaster, and in a very unfavourable condition; whereupon a bread poultice was substituted for the former dressing, six grains of calomel were given immediately, and, in a few hours after, two ounces of castor oil. Eight in the evening: No alleviation of the symptoms, although the bowels have been freely relieved; sesquicarbonate of iron, two drachms, to be taken every hour.

April 18, Nine, a.m. No alleviation. The iron to be continued but in increased doses, and exhibited as frequently as possible. Eight, p.m.: Throat feels easier; no evacuation from the bowels since yesterday evening. The castor oil to be repeated as formerly.

19, Ten, a.m. Can swallow better; speak more distinctly; turn himself in bed; and, when raised, can sit up, though in a bent position. Seven, p.m.: Met Dr. Shearman in consultation, who suggested a blister along the spine, and the exhibition of calomel and opium; but as there was a decided improvement we agreed on continuing the iron, which was now exhibited to the extent of two ounces in two hours, and persevered in till the 27th, when the patient had so far recovered as to be able to walk abroad. From this period the dose was gradually diminished, and on the 11th May entirely discontinued, from the disease having completely subsided.

In support of the utility of iron in neuralgic affections, it may be interesting to add that a few weeks since Dr. Shearman, of Rotherham, had been consulted in a very formidable case of tetanic disease, which had supervened a fortnight previously to his being called. Dr. S., encouraged by the advantages which had been derived by my patient from the use of the iron, likewise exhibited it in the case to which he was called, and with the most perfect success.

The advantages which have resulted from the exhibition of iron in tetanic attacks ought to be promulgated, that the practice may attract the attention of such of our brethren as may be placed in situations and circumstances in which this formidable disease is more frequently met with than this country. Sir James Mc Grigor observes, "All things have been fully tried in the army, in hundreds of cases, except iron." Dr Elliotson employed iron in three instances, and in two of them successfully; in the third the symptoms were so violent that the patient died within twenty-four hours. The thirteenth volume of the "Medico-Chirurgical Transactions" contains reports of ten cases treated with iron, and of this number eight were successful. A previous knowledge of the history of my patient, and looking upon tetanus as a neuralgic affection, and the benefit which has often been known to result from the exhibition of this agent in tic douloureux, induced me to prescribe it in the foregoing case.

Mexborough, April 19, 1842.

FOSSIL ANIMALS. — URINARY CALCULI.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I am desired by the President to request you will give a place in your Journal to the following notice, which may be interesting to many members of the profession.

I am, Gentlemen,

Edmund Belfour, Sec.

Royal College of Surgeons, April 23, 1842.

FOSSIL ANIMALS.

A lecture on the fossil remains of extinct animals, especially of the two newly-discovered quadrupeds, the mylodon and glyptodon, will be delivered in the library of the College, by Professor Owen, F.R.S., on Wednesday, the 4th of May, at nine o'clock in the evening; tickets of admission to which, will be delivered to members of the College upon personal or written application to the secretary at the College.

URINARY CALCULI.

The Catalogue of the Specimens of Urinary Calculi in the Museum of the College, about 600 in number, illustrated by 12 engravings, plain or coloured, as may be desired, is now in the press, and will be delivered to members of the College, at the cost of the paper and letter-press only, no charge being made for the plates unless coloured. Members desirous of possessing a copy are requested to send their names to the secretary at the College, on or before the 10th of May next, in order that the number of copies necessary to be printed off may be in some measure ascertained.

The first volume of the Transactions of the College will shortly be published, and will be sold to such members at cost price as shall transmit their names to the secretary, on or before the 10th of May next.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, APRIL 30, 1842.

There are few subjects which fall within the wide range of medical science more interesting, in every sense of the word, than the subject of insanity. Mysterious as the manifestations of the human mind are in its healthy state, how infinitely more strange and incomprehensible do they become when the divine image has received a taint from its earthly tabernacle—when reason has been subdued by the passions or infirmities of our flesh—when the light which should guide us through the perils of this, our mortal path, has been extinguished, perhaps for ever. The mind and body of man are essentially distinct; but it has pleased the Author of our being so to interweave them together that the manifestations of the one are absolutely dependant on the material condition of the other. We may consider the mind as an abstract, and amuse ourselves with metaphysical disquisitions on its properties and functions; but in matters of practical import, when we are called upon to correct the aberrations of a disordered intellect, we are forced to regard the mind as if it were a bodily function, and remove those causes of disease which, in deranging the machine, disturb the subtile essence connected with, though not produced by, it.

The detection, the treatment, and the cure of insanity, are thus regulated by the same principles which direct the medical man in his efforts to alleviate or remove bodily disease. To him alone has been revealed, though, "as in a glass, darkly," a glimpse of that mysterious link which connects mind to matter. Experience has taught him to distinguish fugitive disturbance of the intellect from permanent and incurable disease—to discover many of those causes which reach the mind through the body—and finally, to apply with success the knowledge acquired, after years of meditation and study, to the cure of the most distressing evil to which humanity is subject.

It is a melancholy but a well-established fact, that insanity increases in proportion to the progress of civilisation. In England, therefore, the number of insane persons is very great. From a return made to the House of Commons in the year 1836, it appears that the number of pauper lunatics and idiots, either confined in asylums or under the care of parish officers, amounted to 13,667. One in every thousand of the entire population is a lunatic or an idiot (pauper). The latest return made by the metropolitan commissioners shows that in the metropolitan district (embracing all houses in London, Westminster, and seven miles thereof, and the county of Middlesex) there are 34 private lunatic asylums, containing 1,713 patients. In August, 1841, there were 92 private county asylums, with a population of 3,315 insane persons.

For the better regulation of these latter, the bill recently introduced by Lord G. Somerset is intended. The noble lord's bill, then, professes to regulate the affairs of 92 private lunatic asylums, scattered throughout the different counties of England, and to supply accurate means for watching over the interests of 3,300 persons, bereft of reason, and confined in the above-mentioned establishments. The supervision of the 92 county lunatic asylums is at present entrusted to the county magistrates, three or more of whom, accompanied by a qualified medical man, visit each establishment four times a year. We shall not now inquire how far this mode of supervision is calculated to further the beneficent intentions of the legislature; it may be defective in many points; a better system might obviously be adopted; but in what respect is it inferior to the jurisdiction which Lord Granville Somerset would erect in its place? Two legal commissioners were to have been invested with the power of visiting every private lunatic asylum in England and Wales. To two musty lawyers—men of quirks and quibbles, often more interested in obfuscating the truth than in bringing it to light—did Lord Granville Somerset propose to entrust the management of the lunatic asylums of this country. The attempt has, fortunately, been in part defeated. In another page of our Journal will be found a full report of the debate which took place on the introduction of the noble lord's bill into the House of Commons. With one exception, every member who addressed the House sanctioned the principle that the supervision of lunatic asylums should be entrusted to medical men—to men whose education and experience enable them to judge competently the various questions which might arise in the performance of their duties.

Lord Granville Somerset has been, for many years, an active member of the metropolitan commission. That commission, composed chiefly of medical men, has worked with great effect and success, at least in the noble lord's estimation. The duties of the metropolitan commission extend to 34 asylums, and about 1,700 patients, enclosed within a circle of forty miles. Why, then, we may ask, should the regulation of county asylums be conducted on a totally different principle? If five medical men be requisite for the efficient visitation of establishments within seven miles of London, how comes it that they are unnecessary in Yorkshire, Northumberland, and the most distant parts of the empire? Are two lawyers equivalent to five doctors in a matter affecting the intellectual health of the community? A considerable number of medical commissioners are employed in the care of less than two thousand persons, living within an hour's ride of London, while two lawyers are to be considered as efficient guardians of twice that number of insane per-

sons, and nearly four times the same number of establishments scattered throughout the country. The idea is preposterous; yet has it found favour in the eyes of a reformed House of Commons.

The amendment of Mr. Wakley will effect, we fear, but little change for the better. If the choice of commissioners be left to the Lord Chancellor, the predilections of the head of the law will naturally lead to a choice of legal men. The hon. member for Finsbury, however, fought our battle manfully, and probably accomplished all that he could effect. We fear that the eccentricities of the medical member have, by lowering his consideration in the House, somewhat narrowed the sphere of his usefulness. If, instead of vapid jests on poetry, which he understands not, and puerile squabbles about an old hat, the member for Finsbury would confine himself to subjects within his scan, and rally a few friends of the profession around him, we might hope for something. Now, our only trust is in the rectitude of our cause—a rotten reed, we fear, in our reformed legislature.

UNIVERSITY OF LONDON.

The monetary affairs of the University of London are not, it would seem, in a very flourishing condition. The Chancellor of the Exchequer has curtailed the portion of the grant destined to supply the salaries by a sum of £800. This has induced a proportionate docking of the salaries paid to the different examiners. Thus the examiners in classics and mathematics now receive £175 each, instead of £200; while the salaries of the examiners in anatomy, surgery, and medicine, are cut down from £250 per annum to £175. In the department of comparative anatomy and physiology a still greater reduction—viz., from £250 to £100 has been effected. In consequence of this latter change Dr. Roget has resigned his office of examiner in comparative anatomy and physiology, feeling that the reduction of salary had a tendency to place his department "far below the other branches of medical study, to which it had hitherto, from the first, been considered by the senate as being of equal importance."

We mention these matters, in which the public will probably take little interest, because they have led to an act that we cannot pass over without a few remarks.

The time at which the University of London was instituted, and the objects for which it was created, are known to us all. One of the guiding principles of the new university was said to be a liberal encouragement of science, for science's sake. The offshoot of our newly-acquired freedom would, it was said, grow up, untainted by those defects which have taken root in the older and less vigorous institutions. Alas, that public virtue should so often consist in mere words! We have watched the proceedings of the University of London with some interest, but have sought in vain for indications of a liberal and enlightened encouragement of science.

On the retirement of Dr. Roget from the office of examiner in comparative anatomy and physiology, two candidates presented themselves before the senate. We do not for a moment pretend to insinuate that the gentleman selected was not fully competent to fulfil the duties of his office; but we say, freely, that in overlooking the claims of Dr. Grant, the senate have inflicted a very heavy discouragement on Science and on her friends.

PATHOLOGICAL SOCIETY OF BIRMINGHAM.

April 2, 1842.

James Russell, Esq., in the Chair.

GALL-STONES.

Mr. Partridge exhibited an ounce box full of gall-stones, composed of white crystallised cholesterine, of sizes varying from a millet seed to a pea, which he said were a very small portion of a quantity which had passed from an abscess near the navel, in a female patient of his, now near seventy years of age. Mr. Partridge then exhibited to the society two of a deep brown colour, which, he stated, when fitted to three others which the patient retained, formed a cast of the interior of the gall-bladder. He supposed they had been evacuated by the natural passages, as they were discharged per anum; they were preceded by very little constitutional derangement. Another, about the size of a sparrow's egg, was exhibited by Mr. P., which had been passed by another patient of his, per anum.

DISEASE OF THE KIDNEYS.

Mr. Cartwright brought before the meeting two kidneys taken from the same subject, transformed into multilocular cysts. From the absorption of the cones, and tubular structure of the organs, and from dilatation and thinning, there was very little of the cortical structure left. They contained together nearly a pint of pus, mixed with urine, by which they were so much distended that the right was about the size of the head of a seven months' fœtus, and the left little less. Floating loose in this fluid were several very irregular shaped calculi, and in the right kidney, one about two drachms in weight, and coralliform in shape, contracted in its middle into a narrow neck, which was confined in an aperture which communicated with two of the cells; the other viscera in the abdominal cavity of this patient, Mr. Cartwright said, were healthy, except the spleen, which was so soft as to be broken down by very slight pressure. This patient went on with his work, although he had suffered for years from pains in the back and difficulty of making water, which had been generally purulent, and at times bloody, up to five days previous to his death. He had shiverings, fever, and a pulse at 120, feeble and wiry. In spite of remedies, he became comatose, and affected with urgent diarrhœa on the Wednesday morning, which gradually increased, and he died on Thursday night.

Mr. Alfred Baker presented to the society a beautiful drawing of the right kidney, taken from a child ten years of age, which was loaded with yellow tubercular deposit, aggregated in some parts, whilst in others it assumed the form of distinct rounded tubercles. The child was of strumous appearance, and had been affected with various symptoms of the disorder from its infancy, and on examination of the body after death, the brain, lungs, liver, both kidneys, and the left temporal bone, were found affected with the disease. The remarkable part of this case was, that there had been scarcely any indication of such extensive disease in the kidneys.

DISEASE OF THE PANCREAS.

Dr. Fletcher then brought before the society a specimen of lardaceous disease of the pancreas. It was taken from the body of a male who had died suddenly, at the age of forty-seven, from fainting, after having been afflicted for a considerable time with symptoms which were thought to indicate disease of the stomach, liver, or some important organ of digestion. The examination of the body took place fifty hours after death. The body was not decomposed at all; inclined to fat, remarkably exsanguineous in its appearance, and slightly jaundiced. The lungs were somewhat infiltrated; the cavities of the heart were quite empty; the omentum and peritoneal coverings of the intestines were thickened and uneven, as if they had been affected with previous inflammation, and they were much loaded with fat; the liver was a third larger than its normal size, generally white, and somewhat fatty; the lower portion of the common gall duct was compressed by the pancreas; the pancreas was a third larger than normal, and so much affected with lardaceous deposit, which is in large masses, that very little of its healthy structure could be recognised; around the pancreas the mesentery was adherent, and included between its layers a creamy and fatty deposit; there was no lardaceous deposit or other disease in the mesenteric glands, or in any of the viscera, except those mentioned above. Dr. Fletcher stated that the rarity of this disease had induced him to make very strict inquiries relative to the symptoms that this patient suffered from, in order to compare them with those described in cases already published; and after looking over about sixty cases recorded by different authors, he found the most general symptoms were, pain in the region of the pancreas (that is, half way between the ensiform cartilage and the umbilicus); vomiting; emaciation; jaundice; an exsanguineous appearance of the skin; thirst; occasional ptyalism; occasional purgings; loss of appetite; and Dr. Bright has mentioned, in connection with disease of the pancreas, fatty stools. The patient, in the case under consideration, had all these symptoms, except the vomitings and fatty stools; and Dr. Fletcher added that, after carefully considering this and the recorded cases of diseased pancreas, he thought that it was possible to detect this very rare affection during life.

Mr. Crompton mentioned the case of a relation of his, who had all the symptoms spoken of except the ptyalism and fatty stools (the existence of which he was not aware of), and the only disease he understood to have been found, on examination of the body, was a scirrhous pancreas.

CIRRHOSIS OF THE LIVER.

Dr. Fletcher then exhibited to the society a liver affected with cirrhosis. The right lobe had a blue appearance, studded all over with yellow points of cirrhosis; the left was very pale, but studded over with the same disease; the structure of the liver was ramified by cirrhosis all through, and in those portions which were free from disease the lobules were atrophied and indistinct; the liver was about a third less than normal; all the other organs were found healthy, except the lungs, which were generally much infiltrated, and the stomach, the mucous membrane of which was pultaceous. The patient, during life, had been affected with intense jaundice, which had come on very gradually, bile still being present in the stools up to the time of his death. The jaundice was the only urgent symptom until a short time before death, when great irritation of the stomach became very distressing, and two days before he died delirium came on.

A remarkable thing in the formation of the body of this patient was, that he measured two inches more from the spine to the ensiform cartilage over the right hypochondrium than over the left (although, as above-mentioned, the liver was a third smaller than normal), which, as the liver did not encroach so high as normal under the ribs, nor down into the cavity of the abdomen, which was ascertained by percussion, induced Dr. Fletcher to believe, during the life of the patient, that there was some tumour in or upon the liver, which pushed the side out directly laterally. There was no ascites in this case, which is very common in patients suffering from cirrhosis.

HOUSE OF COMMONS.

Thursday, April 21.

The house went into committee on the

LICENSED LUNATIC ASYLUMS BILL.

On the first clause being read and proposed,

Mr. Wakley rose for the purpose of moving his amendment. The hon. member stated, that if he should succeed in inducing the house to adopt his amendment, it was not his intention to offer any further opposition to the progress of the bill. He objected to the clause appointing barristers to the office of commissioners of lunatic asylums. What could be more absurd than to select members of the legal profession to sit in judgment on cases of mental derangement? Was not insanity invariably associated with bodily disease? The investigation in which the commissioners would be involved would be purely of a medical character, and therefore the barristers, if they were appointed, would be incompetent to perform the duties which would devolve upon them. Supposing barristers were appointed, what would they have to do? Their principal duty would be to ascertain whether the lunatics were subjected to proper medical treatment. That was the main object which the commissioners ought to keep in view. Was not the noble lord aware that the selection of a competent medical man to fill such an office as that of commissioner would have a most beneficial effect on the conduct of those physicians and surgeons officially connected with establishments set apart for the reception

and treatment of the insane? If medical men were appointed, important tabular statements would be drawn up relating to this class of affections, and much valuable light would be thrown on the nature and treatment of insanity. He complained of the disposition which existed in that house to fill up every appointment to which emolument was attached by a barrister. Whether it was to be attributed to the fact of all bills being drawn up by barristers or not he did not know, but the disposition was evident. That they were unfit, was shown by the total failure of the Metropolitan Commission, in which they had predominated; he would therefore move that the words "barrister commissioners" be omitted, and the words "medical commissioners" be inserted. He had intended to move for the appointment of only one medical commissioner, but as the noble lord proposed that the commissioners should act separately, he felt it his duty to propose that both should belong to the medical profession.

Lord G. Somerset could assure the hon. member that nothing was further from his intention than to cast any slur upon the medical profession. All that he wanted was, that the provisions of the law should be carried out, and that he thought would be better done by gentlemen of the profession of the law than by medical men. The inquiry to be made by the commissioner was not as to the medical treatment of the patient, but whether he was treated properly and with kindness; and with respect to such inquiries a barrister would make as sufficient an investigation as any medical man. Besides, he thought that the appointment of legal gentlemen would be more acceptable to the gentlemen who were attending asylums; they would not like to be interfered with by the advice and opinions of any gentlemen belonging to their own profession. He proposed that the legal commissioner should have the assistance of medical men when he considered it necessary to obtain their advice. The hon. gentleman (Mr. Wakley) had suggested that a medical commissioner should be associated with a legal commissioner; but he (Lord G. Somerset) thought it would be difficult to obtain the services of competent medical men to act as commissioners, for they could not offer sufficient remuneration to a medical gentleman in full practice to induce him to spend half his time in the country in visiting asylums. He brought in this bill in consequence of communications with the Lord Chancellor and the Secretary of State for the Home Department; and he believed, if it was adopted, it would afford means of obtaining a mass of information which might lead to the establishment of a better mode of supervision than now existed.

Mr. Pakington thought it advisable that the commissioners should be members of the medical rather than of the legal profession. Strong representations had been made to him by a medical gentleman who was the proprietor of a lunatic asylum in the borough which he represented, complaining of the inquisitorial system which would be established by this bill, and objecting to the appointment of barristers as commissioners. He hoped that his noble friend (Lord G. Somerset) would reconsider some of the more stringent provisions of the measure. He was glad that the noble lord proposed to give the legal commissioner the power, when he deemed such a course necessary, of obtaining the assistance of the physicans appointed by courts of quarter sessions as inspectors of lunatic asylums.

Mr. W. Miles thought that the duty of inspecting lunatic asylums, which was far from an agreeable task, should be taken out of the hands of magistrates, and committed to two commissioners—the one a barrister, and the other a medical man.

Lord G. Somerset said he proposed to strike out the clause preventing barristers from calling in the aid of medical men, in order that in particular cases they might avail themselves of the advice of the medical visitors appointed by the quarter sessions.

Mr. Wakley said he had had a practical demonstration of the truth of phrenology. He knew before he had commenced his observations that he should not convince the noble lord. The noble lord had opposed his propositions with the most persevering pertinacity. He would now suggest that the profession of the commissioners should not be stated in the bill, but that the responsibility of the appointment of a medical man or a barrister should rest with the Lord Chancellor. There would be no difficulty in getting competent medical men for this investigation any more than there would be in getting competent men of the legal profession. He concluded with moving an amendment, to the effect that two of the commissioners to be appointed should not have their profession stated, but that their appointment should be left to the Lord Chancellor.

Mr. H. P. Howard thought medical men educated as to the diseases of the human mind more fit for such an appointment than men educated in mere legal technicalities. He should oppose the proposition that it be left to the Lord Chancellor to choose whom he might appoint, as his predilections would most likely be in favour of his own profession.

Mr. Henley was opposed to the appointment of exclusively legal gentlemen.

Lord G. Somerset said, whatever might be the opinions of the hon. member opposite as to his phrenological conformation, he should oppose the proposition to leave the responsibility of the choice of the professions of the commissioners to the Lord Chancellor. He had no objection to take the proposition of the hon. member into consideration, but he would rather the house would at once decide the question than throw this responsibility on the Lord Chancellor.

Mr. Wakley persisted in his amendment.

Mr. Hardy said, he should distrust the fitness of a legal commission, he would much rather see one legal and one medical commissioner. On a visit to the Wakefield Lunatic Asylum he had felt convinced of the sanity of a lunatic on conversation with him, who it afterwards turned out was the most violent of the patients.

Mr. R. Yorke was of opinion that members of the legal profession were the least qualified persons to be on the commission.

Mr. Godson thought that medical men were not so fit, from their prejudices. He had heard a doctor swear that all mankind were mad. They wanted the experience and knowledge of the other profession to investigate the truth of the facts under which a lunatic was confined. He wished to see the two professions

combined, in order to arrive at a just result in such an inquiry.

On a division the numbers were,—

For Mr. Wakley's amendment . . .	22
Against it	19
Majority	—3

Lord G. Somerset hereupon said, he hardly knew what course to adopt now, as he knew not whether the intention of the house was to favour the medical or the legal authority.

Mr. Wakley said, he had no doubt whatever as to the perfect practicability of carrying out beneficially the principle which the house, he was glad to say, had affirmed. Perhaps it would be well, for the present, to postpone the further consideration of the measure.

To this Lord G. Somerset assenting, the house resumed—the further proceeding in committee being postponed till that day fortnight.—*Times.*

CERTIFICATES FOR LIFE INSURANCE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—Those members of the Association who were present at the dinner of the anniversary meeting held at Southampton in July, 1840, may recollect that I then stated the circumstance of a gentleman who, having a large family, had insured his life for some thousand pounds, previously, for several years; and, being anxious at about the age of 60, to increase or double the amount of the sum insured, he applied to me for a certificate, which I furnished him with, and stated his having been subject to severe attacks of gout, always once and sometimes twice in each year. The insurance was declined on account of the risk from the large sum applied for; but he was informed that if he would divide the sum under different policies, he might possibly obtain his wishes; he did so, and I gave him six certificates expressed in the same words. *Three* offices complied, and *three* refused to insure. He died within six months afterwards, and, of course, his family had the benefit of the amount due from the three who accepted the insurance of his life. From that time I determined never to give a certificate without having my usual fee, and I have rigidly adhered to it, although one office contended the point not to do it, and another declined insuring, because the sum insured was too small to give them any profit. I was gratified to find that the British Medical Association has passed a resolution to the same effect, and some of its leading members have since acted upon it. These efforts, I am inclined to think, have had some good effect, for I find that several offices have agreed always to pay for the medical certificate, of which I may mention the London, Edinburgh, and Dublin, but more especially the Protestant Dissenters and General Assurance Company of London. An instance has occurred to me within this week, of their not only requiring the certificate of a physician and a surgeon, but also of giving each of them their usual fee. This never having occurred to me before, I feel it necessary to make it known to my medical brethren, and to acknowledge our gratitude to those who have the management of that office, at the head of whom is, I believe, Dr. Price.

In the "British and Foreign Medical Review" for this month (April) the subject is touched upon, page 578, under the head of "Doctors *versus* Assurance Companies," and the case is ably argued by the talented editor of that periodical, to whose opinions and judgment I do most cheerfully acknowledge all due deference and respect; but, in this instance, I am compelled to come to rather a different conclusion relative to the party who is to pay the fee. If I understand that learned editor and *judge* right, he gives a verdict in favour of the company or office, and against the doctor. Now, I have always considered that whoever applies to me for an opinion ought to give me the fee, whether it be from the insurer or the insured—the office or the individual—leaving those two parties to settle it as they may think fit: and I would even further suggest, as I have lately endeavoured to impress, that the fee of the medical man should be paid equally between the office or company and the individual who insures his life; and for this obvious reason, that they both aim at deriving some profit or pecuniary advantage, and both make a sacrifice, depending upon a risk which is not within the scope of the control of either. The medical fee ought to be unconnected with the question of the source whence it is derived.

I am, Gentlemen,
Your obedient servant,
Thomas Jeffreys.

Liverpool, April 20, 1842.

LABOURERS' SICK CLUB.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I send you the copy of a letter I have lately addressed to the Earl of Devon, who is forming a sick club on this plan among his labourers; to each a ticket is given for medical relief for himself and and family, and by paying for an extra number of tickets, his lordship proposes, with the concurrence of the neighbouring landowners, to give them to the aged and decrepid, and also to actual paupers, so that in this district there may be no occasion to apply to the board of guardians for medical relief.

I remain,
Your obedient servant,
William Collyns, M.R.C.S.

Kenton, April 15, 1842.

To the Earl of Devon, President of the Board of Guardians, St. Thomas Union.

"My Lord,—I presume to offer a few suggestions in reference to a conversation I had with your lordship, concerning the medical relief of able-bodied labourers and paupers, as there are to be some amendments of the Poor-law Bill, which, however defective in some parts, unavoidable in so very large a measure, is, I am sure, quite right in its general principle. For having been one of the medical officers of the St. Thomas union from its formation, and having had the care of the same district for thirty years before, I know,

as I have said elsewhere, that the new Poor-law Bill is calling forth the good old English feeling among the labourers, which had been gradually extinguished under the old system—the feeling of honest pride at being able to provide for themselves and families without "troubling the parish." If the new law had only destroyed the fraudulent peculations of the old, under the "suspended order system," it would have been a great boon, but the raising the peasant in his own self-esteem will be an incalculable good; and feeling assured from my own observations that every thing should be done to foster this feeling, I think the united wisdom and talent of Parliament may devise some measure to prevent the poor man, when sick, from being pauperised by anticipation, which is now the case; for with his present wages he cannot afford to pay for medical advice, and, therefore, although he requires no money relief, nor any other assistance, save that of the doctor, he is compelled to apply to the overseer for a medical order, and is thus placed upon the list of paupers greatly to his own humiliation. So strong do I know the dislike to do this to have been, that many have suffered very severely because they would not ask it; and in this way parishes become annually burthened with helpless cripples and incurables, which a little medical advice in the right time might have prevented; it is also a greater expense to parishes, because the medical officers ought, and many who understand it do, order whatever necessaries such applicants, with a medical order, require, to be furnished by the overseer, and refuse to give begging petitions for them to their rich neighbours, because parishes are bound to provide them; but to the able-bodied labourer who has not applied for a medical order, they readily give such petitions for assistance during illness. I think, my lord, the legislature may do much to relieve this class of persons, and by so doing, conciliate them; and also frustrate the objects of designing men, who have been but too successful in making them discontented for political purposes.

What I would suggest is, that a labourers' sick club should be established in every parish, to which every labourer should pay a small sum half-yearly, or rather, his employer should pay it half-yearly, and deduct it by small weekly payments from his wages, unless the labourer chose to pay it himself at the beginning of each half-year; in this way his employer might also give encouragement to an industrious man, by giving him the whole or some part of his contribution; the sums required would be very small. The following is the scale of the Ashcombe and other clubs, which work very satisfactorily:—

A single man or woman, without a child, 4s.
A widow, with one child, 4s. 6d., and 6d. for every additional child.
A widower with one child, 5s.
A man and wife, 6s.; with one child, 7s.; with two, 8s.
Each man and wife, or widower, 9d. for each child beyond two.

If the legislature would entertain the proposition of making the formation of such clubs compulsory on the different parishes, so that the labourers might, without being pauperised, obtain the great boon to them, medical relief, each parish being charged by the board of guardians to which it belongs with the sick club contribution for every one of its able-bodied labourers, on such a scale as the preceding, the expense would be very trifling and the good would be incalculable, and the overseers of every parish could be made to furnish the list of such labourers, and the clerk of the guardians could then ascertain the annual cost to each parish, and include it quarterly in the account. At all events, I think boards of guardians might be relieved from giving medical orders at all to actual paupers, by having these paid for on the preceding, or some such scale, by the overseer, or their officer, as members of the sick club also, so that the list being furnished quarterly to the medical attendants by the board, there never could be any doubt or difficulty about obtaining medical relief, and chance comers or sick vagrants could be charged for on the same scale separately. I believe the giving the labourer medical aid, either by parliamentary enactment for permanent parochial sick clubs, as a separate measure, or by enabling the poor-law commissioners to establish them by authority, without pauperising the members thereof, to be a duty incumbent on the state, a great national act of charity, the policy of which is unquestionable, conferred on those who form collectively the great basis of the fabric of English society, who would show the value they place on so great a blessing by an eternity of gratitude to their superiors.

I have the honour to remain,
Your lordship's obedient servant,
W. Collyns.

Kenton, March 31, 1842."

REPLY TO MR. CROSSE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—The 81st Number of the Provincial Journal contains a letter from Mr. Crosse. In this letter he brings a charge against a certain physician, of casting reflections on the line of general practice. This accusation is most surprising, because if anything has raised that physician from the insignificance and obscurity of his humble arena, it is his uncompromising advocacy of the distinct departments of the medical body, and to the general practitioners he has paid—*vide* No. 726 of the "Medical Gazette"—this just tribute—"There is no class of her Majesty's subjects, except the ministers of religion, which is more useful, more necessary, than the surgeon-apothecaries."

Perhaps the phrase was an erratum; and that for "line of practice" should be read "line of practisers." Since the physician is free to confess that he has reflected on a line of practitioners, who, when their own professional colours are assailed, fail manfully to rally around them. Guiltless, however, himself of personalities, he will not be deterred by any selfish fears from a persevering defence of our lawful, honourable divisions of labour, nor from warning the general practitioners against their intrinsic, as well as external foes.

I am, Gentleman,
Your humble servant,
The Extra Licentiate.

RETROSPECT OF THE MEDICAL SCIENCES.

FRONTAL POLYPI.

M. Bonyer, of Saintes, has published a curious instance of polypi, which formed in the frontal sinuses, as the result of a blow between the eyebrows; they made their way through the middle part of the left orbitar arch, and then placed the upper eyelid on the stretch so as completely to close the eye. Both the nares were blocked up by them. They were removed partly from the forehead, after the ablation of the anterior paries of the frontal sinuses, and partly from the nares. Two large ivory exostoses added to the difficulties of the operation, and were removed. The patient resumed his work as a blacksmith on the tenth day, and seven weeks after the operation, the cicatrix was perfect, there remaining only a large depression between the eyebrows.—*Archives Générales de Médecine.*

THE NITRO-MURIATIC ACID BATH.

Two gallons of water (about ten bottles) suffice for a bath. To each gallon of water add three ounces of the dilute nitro-muriatic acid by measure. The bath thus prepared will keep in use for three days, by adding half an ounce of dilute acid and a pint of water, morning and evening, in order to make up for the waste by evaporation; a portion only of the bath is to be heated for use, after which it is to be added to the remainder, so as to make the whole of a comfortable warmth. Let both feet be placed in the bath, while the inside of the legs and thighs, the right side (over the liver), and the inside of both arms are sponged alternately. This should be continued for ten or fifteen minutes, morning and evening. Whilst using the bath, a gentle aperient, such as Cheltenham salts, or Epsom salts, in some bitter infusion, should be taken every other morning. Earthen or wooden vessels should be preferred as foot-baths, and all the sponges and towels to be kept in cold water, as the acid corrodes them.—*Johnson and Martin on the Influence of Tropical Climate on European Constitutions.*

GONORRHŒA.

M. Rousf, of Bagnères de Bigorre, says that he has cured a hundred cases of gonorrhœa, taken at the commencement, with the chloruret of lime given internally, and used as an injection. The latter is made with twenty-four grains of purified chloruret of lime, four scruples of Sydenham's laudanum, and two hundred and ten scruples of water, and is used three times a day. The pills contain two grains of the chloruret, and one of the gum extract of opium each—of these six are given in the course of the day. The patients are directed to drink largely of *eau sucrée.*—*Gazette des Hôpitaux.*

ACTION OF STRYCHNINE ON THE IRIS.

Professor Puccinotti, of the university of Pisa, made a series of comparative experiments on the relative action of strychnia and belladonna on the pupil. Frictions were made above the eyebrows of a patient, on the left side with an ointment containing strychnia, on the right with one prepared with belladonna. Two hours afterwards an extreme contraction of the left, and great dilation of the right, pupils were readily perceived, thus confirming the statement put forth by Dr. Cortoni, of Pisa, relative to the action of strychnia in causing contraction of the pupil.—*Il Racoglitore Medico.*

SCROFULOUS ABSCESS CURED BY CAUSTIC.

A young labourer had on the right side of his back a large scrofulous abscess, which was opened by a quack, and discharged freely. Dr. Fabbri, who saw him a short time afterwards, was unable either to check the immense exhausting discharge, or to induce adhesion of the parietes of the abscess, when a smaller one having formed lower down, he decided on opening it with the potassa fusa. The next day he found the parietes of the abscess united, and immediately determined to apply the same remedy to the larger cavity, over the entire width of the external surface of which he passed two red-hot irons in parallel lines. When the dressings were removed on the third day, there remained nothing of this vast cavity but the opening which had been made. A smaller one, which formed a few days afterwards near the shoulder, was treated with three applications of potassa fusa, which caused the complete absorption of the pus.—*Ibid.*

THE IODURET OF GOLD.

The proto-ioduret of gold is insoluble in cold or hot water, but is slowly yet certainly decomposed by boiling water. Æther and alcohol exert a similar influence; hydriodic acid and the iodides of potassium and iron decompose it. The gold is precipitated, and new compounds, among which is an hitherto unknown per-ioduret of gold, are found in the menstruum, which assumes a deeper colour than it had before the experiment. Sugar, also, decomposes it, but gum arabic seems to exert a preservative influence; it should therefore be combined with it medicinally.—*Examinateur Médical.*

THE TREATMENT OF ERECTILE TISSUES.

The various plans of treatment, which have been recommended for the cure of erectile tissues, comprise the application of the actual cautery, potassa fusa or the caustic of Vienna, the ligature, excision, incision, setons, acupuncturation, vaccination, laceration of the tissues, injections, compression, ligature of the nutrient arteries, &c.—the whole may be classed into two divisions: the first comprising those which destroy the erectile tissue, the other those which modify its organisation so that it ceases to present the characters of vascularity which distinguish it, and is changed into cellulo-fibrous tissue. In some cases a cure is effected by combining the two processes, so as to destroy one part of the tissue, while the change in its character is produced in the remaining portion. The first mode of proceeding is more especially applicable to superficial, cutaneous tumours; the other to those involving the veins or occupying a great thickness of the parts engaged.—*Gazette Médicale.*

URINARY FISTULA.

M. Pinjon, of Chamelet, has described a case of laceration of the urethra from a fall on the perineum, in which, after the primary symptoms had been removed by proper treatment, an urinary fistula formed,

and the secretion continued to come away by the false passage, notwithstanding a catheter was kept constantly passed. The pain attending the using this instrument was so severe, the patient dreaded its employment; at last, at his earnest request, it was abandoned, and in eight days the fistula was healed.—*Gazette Médicale.*

AMPUTATIONS.

Mr. Rutherford Alcock gives the following as his conclusions respecting amputations, drawn from the records of the Glasgow Infirmary, the Massachusetts and Pensylvania hospitals, the report of Mr. Guthrie after the battle of Toulouse, and his own experience:—1. That the most successful amputations, both in civil and military hospitals, are those for chronic local disease; 2, primary amputations for injuries of military life; 3, secondary amputations for injuries of civil life; 4, primary amputations for injuries of civil life; 5, secondary amputations for injuries of military life.

The following are the conclusions on the relative advantages of primary and secondary amputations for the injuries of civil and military life:—

1. Between the injuries usually received into civil hospitals of a nature to require amputation, and those occasioned by the casualties of the field, an essential difference exists, exercising a most important influence upon the progress of the case, and the results of amputation.

2. This difference consists chiefly in the greater shock, moral and physical, generally caused by the *infliction of the injury* in civil life, from which the patient does not sufficiently recover, in the first twenty-four hours, to bear the shock of an amputation; hence is this first period less favourable for the operation than one more remote, when the alarm has ceased, the febrile action had time to develop, and to be finally relieved by the suppurative process.

3. In proportion as this first shock or alarm is great in the injuries of military life, are the results produced the same. Hence amputations for wounds from cannon-shot and shells more nearly approach in their effects to the injuries of civil life. It follows that it may often happen in military practice that the system is not seriously implicated within the first few hours, and amputation may be advantageously performed; while in those of civil life, amputation within twenty-four hours adds a second violent shock to the nervous system generally, while the patient is still under a strong deleterious action from the first, and the result is either death by shock, or by the development of violent febrile action, by phlebitis, secondary inflammations, tetanus, gangrene, &c.

4. Extensive experience proves that wherever violent commotion has been sustained, deeply involving the nervous centres, and the *morale* of the patient, the operation is better borne after the suppurative process is established. In gun-shot injuries, however, where the whole of the structures of a limb are involved by the lacerating course of the ball, and the excessive comminution of bone, added to the jar or shock communicated by the crushing force of the ball in contact, a more fatal and extensive action is developed, leading to greater irritation and exhaustion in the system, than the ordinary injuries of civil life. This operation, in a subsequent period, proves less successful than when performed in civil hospitals.

5. The result of amputations performed for long existing disease of a limb, often after exhausting suppuration has been long continued, the patient emaciated and greatly debilitated, proves incontrovertibly that this is not an unfavourable state for the success of amputation. The supervening actions are generally less fatal in character, less violent in their development.—*Lancet.*

RELATIVE PROPORTION OF NUTRIMENT.

One hundred parts of white French beans are equivalent in nutritive power to 120 of yellow peas, 148 of farina of cabbage, 170 of farina of carrots, 175 of farina of wheat, 191 of wheat, 193 of French wheat, 200 of rye, 212 of farina of barley, 225 of farina of potatoes, 232 of barley, 246 of Indian corn, 1,096 of potatoes, 1,351 of carrots, 1,446 of white cabbage, and 2,383 of turnips. Those vegetables which contain gluten are the most nutritive bodies, while those which contain no appreciable quantity of this vegetable principle are comparatively low in the nutritive scale.—*British and Foreign Medical Review.*

DIGESTION.

Some kinds of animal food are digested with much greater rapidity than vegetable food. Bread and coffee require above 4¼ hours; fresh beef, from 3 to 3½ hours; salt beef, from 3½ to 5½; salt pork, from 4½ to 6; mutton, 3¼ to 4½; fowl, 4; veal, from 4 to 5½; tripe, 1; and pig's feet, 1.—*Ibid.*

VIABILITY OF A FIVE-MONTHS' CHILD.

Dr. Cochrane, of Edinburgh, has published a brief account of a child, whose birth he attended in February last, and which, although gestation had continued only five months, lived nearly six days, its functions being performed naturally during that time. The testes had not descended. The weight was only two pounds and eight ounces; the length of the body was only fourteen inches; the circumference of the chest was nine inches; the length from the vertex to the point of the nose, six inches; and the occipito-frontal circumference, eight inches. A post-mortem examination was not permitted.—*London and Edinburgh Monthly Medical Journal.*

VICARIOUS NEURALGIA.

In the "Annales d'Obstetrique" are recorded by Dr. Andrieux, of Brionde, the particulars of two interesting cases of facial neuralgia, in each of which the affection showed itself at the menstrual period, and lasted during the time they ought to have been present. It was generally ushered in by some uneasiness in the lumbar region, with slight bearing down pains, but not so great as, in a marked manner, to draw to them the attention of the patient. The return of the catamenia removed the pain.

CROTON OIL IN NEURALGIA.

I do not offer the croton oil as a specific in this complaint; but its effects have been so remarkable as to afford a ground of argument. I ordered it at first in desperate circumstances, in the most severe case of pain in the cheek, and the effect being immediate, the relief perfect and permanent, I should have been to blame had I not followed the practice in similar cases. In very many it had the same happy result. What then, may I ask, would be the conclusion of any in-

quiring mind, when he found a peculiar purgative acting powerfully, but not more powerfully than other forms previously given, attended with immediate and permanent relief of symptoms? Mine, I confess, was that it acted directly on that portion of the canal, the irritation of which, or, as Mr. Abernethy would have said, "the discontented state of which," produced the remote pain. I have referred to a patient who had been subject to tic douloureux, and who had been more than once cured of his pain by croton oil, having died last autumn. There was not any disease in the nerve, but ulceration was found in the mucous coat of the ileum. But, then, it is said, in the reports conveyed to me, that he had been too powerfully dosed with this medicine. In this last supposition we have the important admission that croton oil, improperly used, will act on a portion of the mucous coat, to the formation of an ulcer. Could we depend on this reasoning, it would explain how the better regulated administration of the medicine did, in many cases, affect a portion of the intestine, to the removal of morbid irritation there. Reviewing my experience, I am borne out in believing that the disturbed function of particular parts of the intestinal canal gives rise to pains, differing in their apparent places, according to the portion of the canal irritated. Here, I conceive, there is a wide field for inquiry. If the intestinal canal is estimated at seven times the length of the body, and if it be also acknowledged that the different portions of this long tract of mucous membrane perform distinct offices, and are subject to different influences, there is nothing to repel the idea that these portions, being in a state of disturbance and irritation, shall produce a variety of symptoms, especially differing in their apparent locality. And this view is countenanced by the effect of medicine. We can throw the influence of evacuants on the different portions of the canal, affect the stomach, the duodenum, the large intestine, the colon, or the rectum. Thus is each portion of the intestine proved to be distinct in office, and to possess distinct affinities. It is on this principle that we ought to pursue the inquiry—*first*, on what part of the extended canal does this secret disturbance fall? and, *secondly*, what form or combination of medicine shall especially touch or influence the part affected? We have an instance in the effect of the croton oil. Let us not call it a specific, but seek for other remedies on a just and scientific principle.—*Sir Charles Bell's Practical Essays*, 1841.

FACE PRESENTATIONS.

A common impression in face presentations is, that the delivery must necessarily be tedious and of long duration. This, however, is incorrect. In the Dublin Hospital five cases terminated within an hour; eight during the second hour, and fourteen between the third and the sixth hour. In Guy's Hospital practice, thirteen terminated within twelve hours, nine within eighteen hours, and of the remaining two, one lasted twenty-one hours and the other twenty-nine.—*London and Edinburgh Monthly Medical Journal.*

STATISTICS OF FACE PRESENTATIONS.

Out of 20,517 cases attended by Mad. Boivin, 74 were face presentations; of 22,243 attended by La Chapelle, 103 were face cases; of 17,000 by Kilian, 122; of 6,555 by Boer, 58; of 10,742 by Dubois, 30; of 10,317 by Clarke, 44; of 16,654 by Collins, 33; and of 4,666 attended at Guy's Hospital, 24—making a total of 488 face presentations ou of 108,694 cases, or one in every 222 cases.—*Ibid.*

TURPENTINE IN NEURALGIA.

It is chiefly in sciatic and crural neuralgia that this medicine is most likely to succeed; but it may also be had recourse to with advantage in neuralgia affecting the superior and inferior extremities, and the face, of which I have given cases. The oil of turpentine is always indicated, when the neuralgia does not depend upon an organic alteration, nor on a constitutional principle, seated in the sciatic nerve—such as the virus of syphilis, which must be expelled by mercurial treatment. The chances of success are greatest when all the characters proper to neuralgia exist—such as acute pains, a tracing by it of the course of the nerves, and violent and quickly succeeding paroxysms; and this remark is applicable be the disease chronic or acute, and whatever means have failed.—*Martinet.*

INSTITUTION OF FOUNDLING HOSPITALS.

Magdalenism and foundling hospitals were the offspring of the middle ages; and at a time when the darkest ignorance prevailed, and Christianity was most corrupt, charity was busied with works, such as were never dreamt of in the most enlightened days of Greece and Rome. The induction of abortion was almost universally practised at Rome, infanticide was extremely common, and desertion of children was practised by persons in all ranks of life. But there was no foundling hospital at Rome; and no one saved the lives of these poor infants, except wretches who, after having blinded or mutilated them, sent them to beg in the streets, and lived on their earnings.—*British and Foreign Medical Review.*

DESERTION OF CHILDREN.

In large manufacturing districts, and among the artisans, the parents separate themselves from their children, with a most lamentable carelessness, and look on it as infinitely more convenient and desirable to take their children to a hospice, and to forget them, than to trouble themselves about bringing them up. M. Lelong, a member of the general council of the Seine Inferieure, states that in some neighbourhoods the number of foundlings has equalled, and sometimes even exceeded, the number of children born out of wedlock. At the Hotel-Dieu, at Lyons, there is a lying-in ward for the wives of the artisans, in which from 500 to 600 are delivered annually. More than 60 of these women are detected every year by the vigilance of the police, in their attempt to send their children to the hospice, and are compelled to take them back again. Many elude the officers, and succeed in getting rid of their children. 2,000 are admitted every year into the foundling hospital at Lyons, and of these 400 are considered to be legitimate. During the twenty years from 1816 to 1835, 57,400 women have been delivered in the Maternité, at Paris, and 19-20ths of them sent their children to the Hospice des Enfans trouvés.—*Ibid.*

TURNING-BOXES AT FOUNDLING HOSPITALS.

The tours, or turning-boxes, are an Italian invention of the time of Sixtus IV. Their use was for many years confined to the hospice at Rome, which thence derived its name, *Della Ruota*. In France they are formed by a hole in the wall of the hospice, closed with double doors, between which a candle is placed. The act of opening the outer door, to deposit a child in the cradle, causes a bell to ring, which gives notice to the attendant in the hospice; or sometimes a cylindrical box, placed perpendicularly, and turning on a pivot, is used, and this was the original form of the tour.—*British and Foreign Medical Review.*

THE PRESERVATION OF CANTHARIDES.

M. Martin recommends placing the cantharis, either entire or in powder, in rectified sulphuric æther, in the proportion of five parts of the fly to one of æther, in bottles stoppered with emery; and he assures us that the cantharides, thus prepared, can be kept for three years. The æther does not act on it, except as a preservative.—*Bulletin de Thérapeutique.*

LEEDS INFIRMARY.

Dr. Ralph Shipperdson Hopper has been elected physician to the Leeds General Infirmary, in the place of Dr. Hunter, whose health, we regret to say, has compelled him to resign.

PROMOTIONS AND APPOINTMENTS.

War-office, April 22.

9th Dragoons—To be assistant-surgeon, Walter George Leonard Staunton, from the Staff.

45th Foot—Thomas Best, gent., to be assistant-surgeon.

64th—Surgeon William Smith, from the St. Helena regiment, to be surgeon, vice Fogarty, who exchanges.

65th—Assistant-surgeon James Guy Piers Moore, from the 94th, to be assistant-surgeon, vice Nicholl, deceased.

94th—Assistant-surgeon Edward Menzies, from the 20th Foot, to be assistant-surgeon, vice Moore, appointed to the 65th.

Ceylon Rifle Regiment—Assistant-surgeon George William Powell, M.D., from the Staff, to be assistant-surgeon, vice Rumley, promoted.

St. Helena Regiment—Surgeon Michael Fogarty, from the 64th, to be surgeon, vice Smith, who exchanges.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted on Friday, April 22, 1842.

John Campling, John Price Kelly, James Lambe, Hayes Kyd, George Gale Snelling Coward, Russell Augustus Lafargue, James William Beresford, Henry Harris, Richard Glossen Vivian, Joseph Tuthill Glover, Thomas Morris.

Monday, April 25, 1842.

William Henry Williams, Henry William Somerset, Richard Sissons, Robert Gillman Lord, Thomas Loy, John Mellis, William Proctor, Joseph Bainbridge, Fife, James Pestell.

APOTHECARIES' HALL.

Licentiates admitted April 14, 1842.

J. C. Pigg, Lutton, Bedfordshire; S. S. Stedman R. Pincott, Nuneaton; W. Proctor, York.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

New members of the Provincial Association can have the back numbers to Jan. 1, 1842, by forwarding to us the name of a *country* bookseller through whom they may be sent.

North of England Association.—We have been compelled to postpone until next week, our account of the anniversary meeting of this Association.

The first paper on Vaccination, by *Mr. Newnham*, has been received, and shall be published in our next number, together with the communication of *Mr. Toogood* on "the Crowing Disease;" *Dr. Watson's* Report; and *Mr. Newbold's* case of "Typhoid Pneumonia."

The letter signed a *Yorkshire Practitioner* has been received.

The Leeds Intelligencer, Blackburn Gazette, Gateshead Observer, and several other country papers have come to hand. We should feel obliged if some of our friends would forward to us any journals containing an account of the affair, in debate, at *Gloucester*, between a physician and the bishop.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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PROVINCIAL MEDICAL JOURNAL

And Retrospect of the Medical Sciences.

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EPIDEMIC DISEASE AMONGST CHILDREN.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—As everything relating to epidemic diseases is worthy of the most attentive consideration, and as this subject is one of the especial objects marked out by the Provincial Medical and Surgical Association for further investigation, I have been tempted to present you with a short account of the following endemic visitation, which lately afflicted this locality; and which, although a very mite in the way of contribution, I hope may prove not uninteresting to some portion of your readers, more particularly those who may be already occupied in collecting materials to elucidate this important but hitherto obscure branch of medical science.

I remain, Gentlemen,

Your most obedient servant,

Richard Hindle, M.B., Surgeon.

Sabden, Blackburn, Lancashire.

During January of the present year, the ground in this neighbourhood was covered for some time with snow, but it disappeared entirely in the beginning of February, and was succeeded by unusually temperate weather, quite premature in point of season. This, however, as might be expected, alternated with days of chilling coldness combined with moisture, and a consequence was, that several adult persons suffered from simple catarrh, without any accompanying manifest lever. Although pretty general in its prevalence, it was too trifling to demand any remedial applications.

On Saturday, February 12, an epidemic broke out amongst children, and I was called to many in the course of the ensuing week. The parents very generally dated the commencement of the disorder from Saturday or Sunday. It chiefly attacked children from a few days old to sixteen months. Although many after this last specified period were not totally exempt, yet in them its accession was usually made without inducing any serious disorder of the system. I shall enumerate, in about the order of their occurrence, the symptoms which were generally present, and which characterised the disorder, without going into the detail required by individual cases, which would extend my communication to too great a length for your pages.

First, then, was restlessness, succeeded by the surface of the body becoming hot, dry, and unperspirable; flushing of the face, alternating with paleness, approaching, in some cases, to a blueness about the lips and mouth; respiration very quick and laborious, amounting in many to actual panting, the air seemingly only reaching the larger bronchi, and then immediately expelled; dry teazing cough, soon followed by a secretion from the mouth, fauces, and bronchi of a clear, frothy mucus, which caused a tracheal rattle, audible at a distance; some little dysphagia; the child seemed always in pain when coughing, manifested by crying and contortion of the features; tongue invariably white; great thirst; urine very scanty and high coloured; the alvine evacuations at first varied in appearance, but, after a continuance of the febrile action for about three days, there were very uniformly discharged stools of a grass-green colour; pulse very quick, and rather tumultuous in its beat; some degree of sopor present, and a great inclination to lie on the knee of the mother, with the head downwards; frequent moaning, as if in pain, with tossing of the head about, and particularly backwards; scalp hot, more especially on the occipital region; the breathing varied in difficulty; on applying the ear to the chest, the sonorous and sibilant sounds were very perceptible, intermixed with the mucous, and in some few cases the crepitant, rattle. There was a nightly exacerbation of all the symptoms, with morning remissions. Such is an outline of the phenomena that accompanied the more aggravated cases of this affection; in the milder degrees of it, the symptoms were not by any means so uniform or consecutive in the order of their appearance.

Before speaking of the treatment found most useful in alleviating this disorder, it is necessary to premise that there was great difference noticeable in the degree to which different children were affected, as is generally the case in other epidemics of not unfrequent occurrence, such as measles, hooping-cough, scarlet fever, &c. The cases, in respect to severity of attack, might be divided into three separate classes. In the first two divisions must be ranked all those cases where nature, unassisted, seemed quite competent to grapple with the ailment, either rejecting it at once on its first invasion, or gradually overcoming it within three or four days; in some silently, without any particular evacuation; in others, by spontaneous vomiting or diarrhœa being induced. I have learned, since its decline, that cases referrible to these two classes were numerous, the disease having been very unsparing and general in its seizure; but I only personally witnessed such cases after the mortality, in the more aggravated cases, began to cause alarm, and induce earlier recourse to professional advice.

The third division includes more particularly those who became the subjects of treatment, such as were not fortunate enough to get rid of the disorder within the period previously mentioned, either unassisted, or by the aid of emetics and purgatives, which were the medicines employed, when early application was made; and they, no doubt, in many instances, were conducive towards preventing the full establishment of the febrile disorder, although, from what has been pre-stated on the spontaneous tendency to cure, wit-

nessed in many, this inference, which is certainly problematical, must be received with due restrictions, for it occasionally happens that the emetic failed in arresting the morbid actions and sympathies, and then the regular attack ensued. When this latter occurred, it appeared necessary that a certain course and time should be passed through before obvious signs of convalescence manifested themselves, so that I have no specific to propose, or superior plan of treatment confidently to recommend. In the beginning of my encounters with the malady, deeming it of a catarrhal nature, I administered antimonials, along with demulcents and gentle expectorants, to ease the urgent cough and chest, but it soon appeared manifest that this line of treatment afforded little relief. Leeches to the chest were had recourse to, and they almost invariably relieved the breathing and rattle; but the good effects only lasted a limited time, the rattle soon returning. In two cases, where their bites were allowed to ooze too long, great langour and debility followed, although the patients ultimately recovered. In short, notwithstanding the chest symptoms occasionally appeared very urgent, there was not by any means the same tolerance of blood-letting as in idiopathic affections of these parts, and the benefit obtained was frequently only temporary. The most satisfactory relief was obtained from free purgation, the restlessness, moaning, and crying, often abating immediately after a copious evacuation from the bowels, which was commonly of a very unhealthy character.

The cooling saline medicines, such as nitrate of potash, tartarised soda combined with carbonate of magnesia, and small doses of antimonials, with occasionally a calomel powder, followed by a smart dose of castor oil, these, I repeat, judiciously administered, seemed to answer best as a general plan. Now and then a leech or two behind the ears allayed the great heat of the scalp, and tossing of the head consequent thereon. Antimony, as a nauseating or counterirritant remedy, did not afford any very satisfactory relief. After the fever had abated, a troublesome cough sometimes remained, which, at this stage of the complaint, was relieved by a combination of the demulcent expectorants in common use. The recovery of strength in many was very gradual. In strong children, from the eighth to the twelfth day constituted the critical period, during which either death took place, or signs of recovery began to appear. In three cases death took place within forty-eight hours, owing apparently to suffocation from mucus collected in the bronchial tubes; two of these were in children two days old, and the third, a very delicate child, aged three weeks. Another child, aged four weeks, was apparently saved by an emetic, and mustard poultice applied to the chest.

When the disease attacked children who were previously healthy, and early application for advice was made, the prognosis in general was favourable; not so, however, in the case of delicate children, when suffering under the worst variety. In all, eight children fell victims to its ravages in the period of a fortnight. Besides the three children so very young, above mentioned, three of the rest of the fatal cases occurred to children who had been delicate from birth. I have been unable to ascertain the whole number attacked. The population of the village, according to the last census, is 1,519.

After death, the surface of the body and limbs became livid in many places, but more especially the lips, tip, and edges of the tongue, as if bespeaking some considerable disorganising process in the blood. In one well-marked case, where the little patient, aged nine months, had been ailing a week at my first visit, and which proved fatal on the thirteenth day, I obtained leave to make a post-mortem inspection, and the following were the appearances exhibited:—

Head.—The dura mater adhered extensively to the skull on the right side, so as to render its detachment a work of considerable difficulty. There was no adhesion on the left side. The arachnoid membrane was thickened, and unusually vascular, more particularly on the right side; a little serum was effused between the membranes. The pia mater seemed healthy, as well as the rest of the cranial contents.

Chest.—The anterior parts of the lungs were white, and emphysematous to a considerable extent; the posterior were red and congested, approaching the hepatised condition. On cutting into this latter portion, there was noticeable great vascularity, and occasionally a small drop of white pus appeared on the surface of the cut. This appearance corresponded in both lungs. The trachea was quite natural, as well as the bronchi, as far down as it was possible easily to trace their divisions; there was much mucus in them. The larynx and rima glottidis presented nothing abnormal. The right auricle of the heart was greatly distended with very dark venous blood, and also the veins connected with it.

Abdomen.—The stomach and intestines deviated in no respect from their natural appearance. The contents of the bowels were peculiarly morbid, both in colour and consistence.

REMARKS.

I have not ventured to designate the malady above described by any specific appellation, never having observed one before with symptoms exactly corresponding; however, much weight cannot be attached to this admission, from the circumstance of my experience having been but limited. Dr. Shapter, in his able and very interesting account of the diseases incidental to the neighbourhood of Exeter, speaks of an affection, under the head of influenza, which proved very fatal to children and old people; the symptoms, however, as detailed by him, seemed more applicable to adults; although, from the kind of treatment he found most beneficial, and some other considerations, I am inclined to think there is a considerable analogy between them. The present one appears plainly to have been an idiopathic febrile disorder, with a decidedly catarrhal tendency; and this latter character is probably what will dispose many to call it the influenzal fever, and such it may have been, but it certainly differed from any influenza I have ever seen in the adult; and besides, it seems rather curious that it should have been so exclusively confined to children of such tender years. It would have been much more satisfactory if a greater number of post-mortem investigations could have been obtained. The one, however, inspected was a well-marked case, and the appearances there exhibited rather indicated a general

affection, or, at least, they were perfectly compatible with the supposition of such a condition, certainly favoured by other considerations, and then the organic mischief in the lungs and brain would be regarded in the light of local topical complications, which, in children, we should be prepared to expect, from the general activity of their functions, would be severe and quick in progress, as appears to have been the case here in the lungs; for purulent deposition had occurred in isolated spots, most likely at the terminations of the smaller bronchi. I am not very clear in my own mind about the cause of the emphysematous state of the lungs, but certainly the efforts of the respiratory muscles were occasionally very laborious, so much so as to remind one of the paroxysms which occur in spasmodic asthma; and it is not improbable but that, during some of these efforts, the air cells might become ruptured, and their contents diffused.

In connection with the present communication, I may state that, ever since I began my professional career in this isolated village, I have been again and again impressed with the tendency of a very great proportion of the diseases coming under treatment to become endemic; and the following instances can appear no more surprising to your readers than they did to myself, at the time of their occurrence:—About the period of prevalence of the present epidemic, three adult persons consulted me about discharging, with great pain, blood and shreds of fibrin along with their urine; this was the chief ailment, and there was no appreciable constitutional disturbance. Again, in one week, four individuals applied to me on account of agonising headache, which in some was so threatening as to require depletion. In the course of last year three children were brought to me, within the same fortnight, suffering from jaundice without any very obvious cause. In the February of the same year two persons were much tormented with a constant annoying tinnitus aurium, without any other complaint, and a third person, who has experienced, for at least two years, an unceasing ringing in the ears from, I suspect, an organic cerebral affection, told me that it was much aggravated about this time.

There is something so extraordinary in these occurrences, or, at least, the relation of such is so rare, that they are quite calculated to create a suspicion as to whether the observer really designs to impose upon one's credulity, or he is mistaken in the alleged facts; and, for these reasons, I could scarcely have prevailed with myself to give them a serious consideration, had I not been encouraged so to do by a perusal of the excellent paper in the "Transactions," previously alluded to; for in this Dr. Shapter mentions peritonitis and hydrocephalus having assumed the endemic character, which is equally remarkable with the occurrence of ailments of lesser importance.

It is not sufficient to set them down as purely accidental concurrences, for the great probability is judging from the past, that I shall not see two cases of either hæmaturia or icterus happening contemporaneously for the next two years, nay, much longer, except from some occasional and plainly manifest cause. Why diseased action should prefer to locate itself in a particular region of the body, at one period of the year, and at another, very little remote, select a totally different one, is a question perhaps not very easy of solution; but that there is a disposition of this kind often prevailing, I feel pretty confident, few practical and observing men will dispute. The circumstance strongly reminds me of a custom, which must surely be a remnant of the old astrological system of medicine, that prevails in some rural districts among the blacksmith farriers, of always consulting "Moore's Almanac," before they perform any operation, for they have an impression that the "signs," as laid down by Moore, indicate where the greatest pressure of blood exists for that period, so that if one of their patients should present with a tumour on the thigh requiring extirpation, and they find that the "sign" lodges there that day, they refuse to operate, lest the pressure of blood might prove too great for restraint. Now, without professing for a moment to allow my faith such unbounded scope, as a belief in this doctrine requires, it may be surely allowed to reflect upon the origin of the impression amongst them. In regard to the order of appearance of epidemics in this village there appears to have been some regularity, but as I am not fully satisfied of the accuracy of my information on this head, part of it being built on popular tradition, I shall waive for the present any further remarks, being firmly convinced that all imperfect and unfounded statements are not only useless, but worse, by perplexing and rendering more intricate a subject which, of all others, is universally acknowledged to be involved in the greatest mystery.

FIVE CASES
OF THE
CROWING INSPIRATION OF CHILDREN,
WHICH OCCURRED IN THE SAME FAMILY.

By Jonathan Toogood, Esq.,
Senior Surgeon to the Bridgwater Infirmary.

1817.—Case I.—H. I., when about a year old, was suddenly seized, without any previous indisposition, with the following symptoms:—A slight crowing noise was first observed, a feeble distressing cry was uttered, followed by a sudden suspension of breathing and threatening of instant suffocation; the countenance became livid, the eyes starting from their sockets, frothy saliva was protruded from the mouth, the jaw fell, and he remained so long in this state that the bystanders thought he was dead. He was laid in a horizontal position and kept perfectly still, when, after a few minutes, a slight attempt at inspiration was made, which gradually improved, until his complete recovery was established. The contents of the bladder and rectum were evacuated during the attack; his countenance was very pale for a long time afterwards. During the next six months he had several slight attacks, which almost invariably commenced during comfortable easy sleep, and were preceded by an expression of pain in the countenance, and, although of short duration, were very distressing. After this time they ceased entirely, and he has grown up to manhood in the enjoyment of good health.

1821.—Case II.—F. I., his brother, was attacked in the same manner when about six weeks old, and

after repeated seizures, suddenly expired in one when fourteen weeks old.

1823.—Case III.—O. I., another brother, had a similar attack when about a year and a half old, but less violent. These recurred occasionally until he was three years old, when they ceased. He has grown up to manhood in good health.

1826.—Case IV.—A. I., another brother, began to have the same affection when about six months old, which continued until he completed his fourth year. During this period the attacks were sometimes so violent as to threaten instant death. They were occasioned by crying or passion, and once in consequence of a fall, which brought on so violent a seizure, that there appeared no probability of his recovery. He was kept perfectly still, with his head a little raised, and after two or three minutes he began to breathe again. After this he had slight attacks on crying or losing his breath, but never a serious one; the countenance always became livid, and respiration was suspended, but there was no convulsion, which invariably happened when the attack was severe.

October, 1829.—Case V.—M. A., a sister, a delicate child, born at eight months, was very well until six months, when she was seized exactly as her brothers had been, without any previous indisposition. These attacks recurred frequently until the end of May, after which time she had slight ones. Convulsions, lividity of the countenance, and evacuation of the contents of the rectum and bladder, always accompanied the attacks. On one occasion she lay apparently dead, when the lungs were inflated, to which her recovery was attributed. In the month of June, when three quarters of a year old, the bones of the head, which had closed as firmly as usual at that period, except the anterior fontanelle, separated again, and the division of the sutures could be easily traced with the finger. After this she appeared to get much better, and the spine, which seemed inclined to bend before, became strong, and although she occasionally made a croupy noise, and had very slight attacks of lividity of the countenance, and temporary suspension of the breathing if she cried much, there was no severe symptom or convulsion. She continued pretty well until the 3rd of April following, and was a remarkably active, sprightly child, had eight teeth, and was then cutting the eye teeth. Whilst asleep in the garden she was suddenly attacked, as formerly, but soon recovered. This was supposed to arise from teething, and the gums were freely divided immediately. She now began to show symptoms of hooping-cough, and was often unwell, making a slight croupy noise, which, however, did not appear to hurt her, as she often laughed before it was scarcely over. Her nurse thought it a trick. She appeared to be going through the disease favourably, but on Tuesday night did not sleep as well as usual, from more frequent fits of coughing, and was irritable the next day, scratching those about her on the slightest cause. On the following day (Wednesday) she had another slight attack. Her bowels having been carefully attended to, and the cough having been more troublesome during the night, some ipecacuanha wine was given at eleven o'clock on Thursday morning, which operated well. At one, whilst lying in the nurse's lap, she had a most violent attack, and was, for some time, believed to be dead, but after pouring an ounce and a half of brandy and water down her throat, she slowly, and with great difficulty, recovered. This was followed by convulsion and long continued spasm of the muscles, so that the body was quite rigid and could not be bent, although kept for a considerable time in a warm bath. She appeared to suffer great pain for two hours, after which she became easier, and remained so till seven o'clock, when the spasms returned with equal violence, and recurred every two minutes, affecting the right side chiefly, until five o'clock the next morning. No relief was obtained from the application of leeches, warm bath, the warm water injection, or lancing the gums. About eight o'clock she screamed violently, but she was sensible and took nourishment several times. At ten the spasms returned, but with less violence, but they continued with little variation during the whole of Friday and until Sunday morning, when she appeared to get somewhat easier, and although she was less drawn, and the dreadful grinding of the teeth had subsided, there was still a constant frowning and knitting of the brows, denoting great pain. She appeared sensible during the greater part of Sunday, took food occasionally, and slept a good deal, but it was doubtful whether she saw distinctly; there was no squinting. On Sunday night she became affected with spasmodic twitchings of the muscles, and was sometimes harassed with cough. She had a repetition of her former attacks at four in the morning, and again at ten, from which, however, she soon recovered. Another fit recurred at twelve o'clock, whilst lying perfectly quiet, in which she expired.

The body was examined early on the following morning. It was not emaciated. Upon the removal of the pericranium, the skull-cap presented a natural appearance, the fontanelle not being perfectly closed by ossification. It required more than the usual degree of force to tear off the skull-cap from the dura mater, and when this was effected, it was found that a large portion of the membrane adhered to the right parietal bone. The veins were turgid with blood. Between the arachnoid membrane and the pia mater, a substance of a gelatinous nature, rather hazy or milky in colour, was diffused nearly over the whole surface. Some fluid escaped from the surface of the brain, but the quantity could not be ascertained. Upon cutting into the lateral ventricles, they were found to be distended with fluid, as was also the communication between these and the third ventricle, which, as well as the iter ad infundibulum, and the iter a tertio ad quartum ventriculum, was also distended with fluid. There was also much fluid at the base of the brain and in the fourth ventricle. The whole quantity amounted to about four ounces. The substance of the brain was softer than natural. The viscera of the chest and abdomen were healthy. No glandular affection could be detected in any of these cases.

A zoological society has just been formed at Berlin under the presidency of the distinguished Humboldt; and a zoological garden is to be forthwith established at the south end of the park. The king has signified his approbation, by granting to the society all the animals, which were kept in the Island of Peacocks, near Berlin, and has authorised his treasurer to advance about 360,000 francs, without interest, repayable by ten equal yearly instalments.—*Athenæum.*

TYPHOID PNEUMONIA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you think the subjoined case worthy a place in your Journal, the insertion of it will oblige

Your obedient servant,
EDWARD NEWBOLD.

Hawkhurst, April 26, 1842.

Mrs. L., aged 23, a young woman of delicate constitution and slender frame, after several days complaining of lassitude, debility, indisposition to exertion, and depression of spirits, was seized on the 7th of April with shivering, sickness, pain in the head and limbs, stitch in the right side, greatly aggravated by a deep inspiration, and frequent hard cough, &c., and continued getting worse until the 12th, when she sent for me.

I attended immediately to the summons, and found her in bed lying extended upon her back, moaning, and evincing much distress, and from general appearances was at first apprehensive of typhus fever. There was a peculiar anxiety and lividity of countenance, sunken state of the eyes, depression of lower jaw, and much black sordes collected about the lips and teeth. The tongue was dry and brown; the breath extremely fœtid; great thirst; skin hot and parched; urine pale, and undiminished in quantity; frequent hard cough; pain in the right side was constant, and very much aggravated by the cough, and taking a deep inspiration; respiration 40 per minute; pulse 130, weak, and quick; headache; confusion of thought; constipation of bowels.

To take a powder, containing fifteen grains of jalap and four grains of calomel, immediately; to apply a mustard cataplasm to the chest, and to have a dozen leeches applied as soon as possible, and to take two tablespoonfuls of the following mixture every two hours:—

Wine of tartar emetic, three drachms;
Tincture of opium, twenty drops;
Syrup of oranges, half an ounce;
Camphor mixture, seven ounces.

April 13. The powder has operated three times during the night, bringing away each time a quantity of dark and offensive fæces. The leeches have been omitted, in consequence of the parties being unable to procure them. Has passed a very restless night, with delirium; pain in the side no better; cough very distressing; pulse 128, and rather fuller and harder than it was yesterday; respiration 43, and much oppressed; mucous râle in the large bronchial tubes; dulness on percussion over clavicle on the right side, near its sternal end; and absence of respiratory murmur in upper portion of right lung.

To be bled immediately from the arm to eight ounces; to have a blister applied to the right side of the chest afterwards; to have a pectoral mixture for the cough, and to take a grain of tartar emetic, with five minims of tincture of opium, and a drachm of syrup of orange peel, every two hours in an ounce of camphor julep.

14. Has felt somewhat relieved by the bleeding, and has slept at intervals during the night, but at times evinced much restlessness, rambled, and talked very incohereatly; appearance of countenance better; sordes about the mouth and lips much removed; headache continues; tongue brown and parched; incessant thirst; pain in the side not so acute; cough not quite so frequent; respirations 39; pulse 126; the blood drawn yesterday buffy, and the coagulum loose; the blister has risen well.

To be bled again this morning from the arm to eight ounces, and to continue as before the mixture and linctus, and to have the hair removed from the head.

15. The bleeding yesterday produced syncope; has had a better night, and has not been so delirious as on the preceding evenings; pain in the side relieved, and felt only when she coughs; respirations 30, less difficult, and frequent; pulse 90, and very soft; copious perspiration; expectorates freely; cough less troublesome; headache gone; tongue brown in the centre, but cleaning at the edges; bowels have not acted since the night of the 12th.

To take immediately twelve grains of rhubarb, three grains of calomel, and five of aromatic powder, in some jelly; to have another blister applied to the chest; and to continue the mixture and linctus as before.

16. Continues better; bowels have not acted.

Sulphate of magnesia, one ounce;
Compound infusion of senna, six and a half ounces;
Compound tincture of cinnamon, four drachms. To take an ounce and a half every third hour until the bowels are opened.

After the bowels have been relieved, to continue the tartar emetic mixture draughts every four or five hours, and to have some mutton broth.

20. Has been improving daily since the last report. Cough very much better, and can inspire freely without pain; tongue clean, and all symptoms of fever disappeared. Has continued the tartar emetic draught up to this day, in a state of the most perfect tolerance, having never vomited from the commencement. The breathing and pulse, however, continuing much above their natural standard, the former 27 and the latter 90, the tartar emetic is to be discontinued, and two tablespoonfuls of the following mixture to be taken in its stead every four hours:—

Tincture of digitalis, one drachm and a half;
Tincture of hyosciamus, two drachms;
Infusion of Calumba, four ounces;
Water, three and a half ounces.

23. Patient down stairs. Cough quite gone; dulness of percussion over right clavicle removed; respiratory murmur audible over the whole chest; appetite very good; pulse 75; respirations 24. Discharged.

VACCINATION DEFENDED AGAINST THE ATTACKS OF MR. BROWN.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In the present and some subsequent communications, I purpose to take up *seriatim*, and reply to the letters lately published on the subject of vaccination by Mr. Brown, and addressed to Dr. George Gregory.

In doing so my sole object is *truth*, and a desire to obviate the mischief likely to accrue from the perusal of these letters; and on the threshold of my under-

taking I beg to say, that any observations which may seem to be harsh are directed against the book, and not against its author, of whom I know nothing but from my recollections of a crusade against vaccination undertaken by him more than thirty years ago; and by this admission he will discover that his literary antagonist is not a tyro, but rather one who has drank deeply in the cup of experience, and whose hair is silvered by age, though he may not yet have reached the Vale of Decrepitude.

I am perfectly free to confess, that I do not think the practice of vaccination has yet reached perfection, and that its apparent simplicity has rendered its professors careless and inattentive to minute points, which would have been observed if a greater amount of importance had been attached to these minutiæ.

Since it is difficult to choose an arrangement other than that which the author has selected for himself, I purpose following him step by step through his own reasonings, and showing his numerous inaccurate data and inconsequential argumentation.

1. Mr. Brown sets out by asserting that the vaccine malady possesses "only a partial, feeble, and temporary power of protecting the human body against the influence of small-pox," while varioline "afforded the means of preventing the occurrence of death in one out of every four or five cases of the epidemic disease, with only the chance of one death in five hundred; and all who adopted such a means of defence were not only free from all apprehension of future danger, but freely entered into all the duties of social and civilised society."

Now to these assertions we take leave to oppose the counter assertions, that the protection afforded by vaccination is not partial, feeble, and temporary, but that it is greater than that afforded by small-pox itself; for none now can doubt the occurrence of small-pox a second time in the same individual; and no reasonable person can deny that more deaths occur in those individuals, so subjected to a secondary attack of small-pox, than in those who suffer from small-pox after vaccination. This was exemplified a few years since in a most marked manner in Edinburgh (see Thompson) and other places; and the following narrative will exemplify this fact by an occurrence which happened under the writer's inspection.

An individual, who was altogether unprotected, fell ill with small-pox, and during this illness he was visited and nursed by his father and two brothers; the father having had natural small-pox most severely, the elder brother having been very successfully inoculated, and the younger brother as successfully vaccinated. All three deemed themselves secure, yet all three contracted variola, the father escaping death with the utmost difficulty, the elder brother being carried off by the disease, and the younger having a very mild form of modified small-pox. If this were a single history it would be of no value, but it is borne out by very many such histories, of which it is given as an example, chiefly valuable on account of the rarity with which such a juxta-position of circumstances could occur.

I will, however, add in this place, that as many cases of secondary small-pox as of small-pox after vaccination have occurred in my own practice. I mention this not for the sake of drawing a parallel between them, because I believe that in my own experience the former have been many, the latter singularly few,—but for the purpose chiefly of inferring that this is not the touchstone by which the value of vaccination is to be tried, but the relative mortality. If small-pox occur in a secondary form, *a fortiori*, it should be expected to occur much more frequently after vaccination; but if in the former the proportion of deaths is greater—infinitely greater than in the latter—then does vaccination occupy its true, its impregnable position—that of offering a greater amount of security than small-pox itself.

I will bring forward another instance of the fallibility of small-pox, which occurred in a relation of my own. He was vaccinated when young; he went to reside in London while studying the law; he got small-pox pretty severely, and, twelve months afterwards, got it again in a much severer form, from which he recovered with difficulty. But do I infer from this that variola increases the susceptibility for itself?—or that a first attack affords no protection from a second?—or that the protecting influence of the first attack is worn out in twelve months?—or, finally, that the susceptibility to small-pox is increased by vaccination? Certainly not; yet such reasoning would only be parallel with that of my antagonist.

Perhaps it would be invidious to enter upon minute criticism of Mr. Brown's work; yet, as it is a pretty generally allowed inference, that when a man thinks clearly he writes correctly, the inference is warranted, that when he writes incorrectly he thinks obscurely. Now, incorrectnesses are very frequent—e. g., in the page open before me, I find the "insecurity which is to be obtained," as if we could obtain a negation; and that "the first impression concerning any important considerations are," &c., a verbal error, say, which, if it were a solitary instance, ought not to be noticed, but, as it is a very frequent occurrence, does show a great want of precision of thought.

It seems that Mr. Brown was once an enthusiast for vaccination—that he adopted the idea of its offering perfect security against small-pox—and finding that his favourite idol did not possess all the attributes with which it had been invested by his ardent imagination, he has followed the usual course of enthusiasts—his zeal has grown cold—and he has rapidly passed through the frigid zone of indifference into the opposite hemisphere of bigotry against, instead of enthusiasm for, the object of his idolatry. Such, however, is the result of experience in all similar cases, that opinions so formed and so changed must at all times be received with a great deal of caution, not to say suspicion.

Vaccination has more to fear from its injudicious friends than from its enemies; and those are injudicious friends who hold it up as a perfect security against small-pox, or who ask more for it than I have asked in a former paragraph—viz., that it affords a greater security from the fatal consequences of small-pox than small-pox itself.

I well recollect Mr. Brown's first entrance upon his crusade against vaccination; and, therefore, I willingly yield to him the palm of priority, though I venture to question the value of this distinction. I must, however, take leave to remark, that I think his time and talents would have been better employed in

perfecting a process which—it would be contrary to all experience to believe—had started at once from infancy to manhood, from the first glimpses of truth to its perfect development. I must also most distinctly deny his assertion at page 12, that vaccination "now stands convicted, in the judgment of the whole candid and experienced members of the medical profession, of being unworthy of further confidence." So far from it, I would assert that, however prejudices may have been created in the minds of many, yet that, in the real judgment of those who have not suffered themselves to be led astray by a few facts which only invalidate the perfection of the process, or by the erroneous reasonings of partial observers, the value of vaccination stands unimpeached, not as a prophylactic against small-pox, but as the best security which can be obtained against the malignity of its effects.

I will not trespass longer upon your time in the present letter; but, if you think the subject worthy of more extended consideration, I will, if my engagements permit, follow Mr. Brown through his volume for a few successive weeks; and, with best wishes for your success,

I remain,
Yours faithfully,
W. Newnham.

Farnham, April, 1842.

INSPECTION OF COUNTY LUNATIC ASYLUMS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—On the 17th of March last, Lord Granville Somerset brought forward a motion in the House of Commons relative to the inspection of lunatic asylums in England and Wales, in which, during his speech, and in that of Lord Ashley, as reported in the "Times" of the following day, expressions were contained, and principles attempted to be established, no less derogatory to the medical profession than they are undoubtedly and palpably incorrect. Not being anxious at any time, and particularly in my present state, to appear before the public in such matters, I have waited with some impatience in the hope of seeing the subject taken up by your Journal,* the "Lancet," or the "Medical Gazette," which I am accustomed, in your various walks, to consider the three weekly organs or guardians of the public medical weal—but as you have not hitherto done so, I shall endeavour, with as much brevity as the subject will admit, to bring it before your readers, and particularly the council of the Provincial Medical Association, and the officers of other public medical institutions, that measures may be adopted to support the character and defend the interests of the profession. For whatever may be the expectations entertained by some of medical reform—of which, judging from other reforms, I have very limited hopes—it would be bad policy to neglect the present rights of the profession, to lose the substance for the shadow, and tacitly to submit to encroachments no less unjust than injurious, under the flattering prospect of ultimate though indefinite redress.

It is known to every medical practitioner that there are several acts of Parliament relating to lunatic asylums and the care of their unfortunate inmates; and to improve, amend, or extend one of these acts, passed in 1828, is the ostensible object of Lord G. Somerset in his proposed new bill. To guard myself from, or rather to deprecate, any real or apparent inaccuracy, I think it proper at this stage to lay before you the limited sources of information which are at present in my power. Having been recommended to this remote quarter to regain my health, which gave way early last winter, and being forbidden the use of much or severe study, my reading is mainly confined to the "Times" paper, and the three medical journals already referred to. My authorities, therefore, are limited,—

1. To the report in the "Times" of March 18, the speakers being Lord G. Somerset, Mr. Wakley, Mr. Hawes, and Lord Ashley, with a few brief remarks from Mr. C. Wynn.

2. A few days afterwards the following useful paragraph, which I shall here copy entire, appeared in the "Times," headed,

"*Metropolitan Commissioners of Lunacy.*—From the official returns ordered to be printed by the House of Commons, on the 3rd of February last, it appears that there were under their direct charge or inspection 36 houses, of which 4 were devoted to pauper and private patients, and 32 to private patients only, these being independent of the different county lunatic asylums. Of these 32 houses, there were 5 kept by resident medical proprietors, 4 by physicians resident in London, 16 by resident proprietors not being medical men, and 7 by non-resident proprietors of the same class. Of the counties under the joint jurisdiction of the commissioners and the courts of quarter sessions, there are 14 which contain no licensed houses, and the remaining 26 contain 87, which did not, in the course of five years, include an average of above 2,500 patients. Within the period there was only one license suspended, which was in Dorsetshire. In the last five years the expenses of the commissioners have been no less than £13,583 17s. 6d., of which there was paid, as fees to two barristers, £2,920; to five physicians, £6,498; the salary of the secretary, £2,000; and chaise hire and other incidental expenses, £2,165 17s. 10d. The average annual charge of inspecting each house was £388!"

3. In the "Lancet" of April 3, under the head "British Medical Association," at a half-yearly meeting held March 29, the subject, among other matters, is introduced by Dr. Granville in a spirited manner, and a resolution passed, on which a petition is to be founded, and presented against the bill.

4. On the 8th of April there appeared in the "Times" an able and argumentative letter under the signature *Ignatus*, which, had it been also inserted in the medical journals, or even an epitome of its contents given, my present attempt would have been superseded. Besides clearing myself, I wish to put your readers in possession of these data, which are easily attainable. Whatever may have been done or published in other quarters, I have no means of ascer-

* The subject was taken up in our Number for April 16, which had not reached Dr. Hunter.

taining, situated, as I am, in the extreme corner of this remote Patmos.

Lord G. Somerset, then, after some preliminary observations, proceeds to state the great object of the bill of 1828, which has already undergone several amendments, to have " proper houses of a proper character licensed for the reception of insane people, to be conducted on proper principles, so as to conduce to the comfort and insure proper treatment to the inmates; to prevent persons not in a state of insanity being confined; and, lastly, to prevent persons when recovered being detained in such asylums." By the same act it appears " that all licensed houses were brought under two separate and distinct authorities." A certain number, about one half, under the authority of the metropolitan commissioners, consisting of twenty individuals, including five physicians, two barristers, the rest gentlemen who dedicated their time and trouble to this object. This commission superintends all the licensed asylums in Middlesex, Surrey, Kent, and Essex, of course including London, and is the object of the noble lord's unqualified panegyric.

" The remainder of the houses licensed," in the noble lord's words, " throughout the rest of England were placed under a different jurisdiction; they were licensed by the magistrates at quarter-sessions, and placed under the superintendence of physicians and magistrates then appointed to visit them; and in addition to these gentlemen were others, who devoted their time to this work of humanity. There were also individuals whose particular business it was to pay more especial attention to the conducting of these houses." While Dr. Granville, in the speech already referred to, states, " the latter bodies are to make reports to the metropolitan commissioners, and these again are to make annual reports to the government." We have here apparently plenty of machinery, and on no antique model either, provided it were well wrought. This is the question as regards the public. Lord G. Somerset thinks it is not, and to amend it proposes his present bill, which, as I understand it, has this amount and no more—to appoint the two lunatic barristers already in the metropolitan commission, who are now only paid for the time they devote to the London district, to superintend all the asylums in the country. They are to relinquish all their legal pursuits, and to receive a suitable salary.

But I anticipate—before, however, quoting more of the noble lord's speech, or attempting to analyse it, or that of the other speakers, let it be distinctly understood that I no more wish or intend to impugn the noble lord's motives than I wish my own integrity in this matter to be questioned. With Dr. Granville and Ignotus, I believe him and Lord Ashley, whose speech I shall also have to comment upon, to be two most estimable noblemen, ornaments to their own order and an honour to the British senate. I think, however, that in this instance they are both grievously mistaken, and, as regards the medical profession, severely unjust.

Lord G. Somerset, then, to show cause for his bill, proceeds to point out the defects of the present provincial system, the *gravamen* of which is, the inattention of those who ought to visit or inspect these asylums. This I am not prepared either to affirm or deny, having no appointment of the kind, though I think it can scarcely apply to the magistracy of the county of York, among which there are both clergymen, physicians, and barristers. After paying his brother magistrates some left-handed compliments for their negligence or apathy in the discharge of this important duty, the noble lord returns to his favourite metropolitan commission. " He believed that no system could work better; the medical, legal, and other gentlemen of that commission had vied with each other in their exertions to render their superintendence as efficient as possible—they had not only done a great deal of good by their exertions, but prevented much harm." *Ignotus* coolly hints upon this that *seven* of them were pretty well paid for these exertions, but that I think is all fair—the labourer, in his proper place, is worthy of his hire. I come now to what I must term the puff preliminary, preparatory to the introduction of, and assigning the reasons for, the singular machinery by which the noble lord proposes to work the new bill, wherein he not only gives the provincial magistracy a regular summerset, but, which is our point, in the same breath deals heavy blows and great discouragement to the medical profession—a profession which, whatever the noble lords may think or aver, I feel confident to assert, and competent to prove, has not only fewer favours from the government than any of the other learned professions, but does more in its different branches for the poor and helpless than all the lawyers and law-makers in the empire.

At the risk of encroaching upon your limits, I must here state his lordship's views at some length, and make my subsequent remarks the shorter, as it is highly desirable that the *ipsissima verba* should appear in a more permanent form, particularly in a medical journal, than in the fleeting columns of a daily paper.

" Nothing could be more valuable than the services of the barristers who had been appointed on the commission during the whole period of their appointment. This object was, by the bill he wished to introduce, to appoint that some of the commissioners acting in London should make circuits of inspection to the asylums in the country districts. He had not the slightest doubt but that the habits of business which these gentlemen would have acquired would be found most valuable, and their being also a part of the London commission would act as a check on their proceedings in the country, and the advice of their fellow commissioners in London would be very useful to them in the discharge of their duties. He had now to consider whether it would be desirable to have medical or legal gentlemen, as paid commissioners, to make circuits through the country. He was of opinion that it was not so desirable to appoint medical men, as generally, though there were some brilliant exceptions, they were not distinguished by the habits of exactness which legal men acquired from their education, and also, because it would be difficult to get any medical gentlemen of first rate-ability—and others he would be sorry to see appointed—to give up their practice, and dedicate the whole of their time to the duties of the situation, more especially as it was not in his (Lord G. Somerset's) power, for various reasons, to move that the bill should be more than of a temporary duration. What he proposed to do was this, that, instead of the commissioners being appointed as they now were, allowed to practise, and only paid for the hours they

devoted to this duty, that they should dedicate the whole of their time to the duties of the situation, and be paid by such a salary as should insure the appointment of proper individuals of high legal attainments, and which at the same time should not be so large a salary as to encroach on that fair economy which was proper to be observed. He proposed, therefore, that legal gentlemen should be appointed with a fixed salary, that so long as they continued on the commission they should devote the whole of their time to the duties of the situation, and to their duties on the London commission. He proposed that these commissioners should, once at least in every four months, visit every licensed asylum for the reception of insane persons in the country. It appeared from returns made, that there were somewhere about 60 or 70 houses licensed for the reception of insane persons in the country. It was rather curious to observe that in about 25 counties —in all the counties in Wales and some others in England—there was not a single asylum for the reception of insane persons, consequently, without allowing more than fair time for relaxation for health, he conceived the barrister commissioner, would have proper time to visit regularly every asylum in the metropolitan district four times, and in the country district three times a year. It was not his intention to do away with the visits of the magistrates in the country district as established by law. He thought that the barristers, from their experience acquired in London, and from their knowledge of the law, would make the local magistrates more active in the discharge of their duties, and that the result would be a very regular superintendence on the part of the magistrates, as well as by the commissioners. Every licensed asylum in the country would thereby be visited six times each year; and he thought also, from the greater degree of exertion which would be caused amongst the country gentlemen, that they would be induced to be more frequent in their attendance than the law required. On the visits made by these individuals, he proposed that their attention should be specifically directed to various matters—first, to the state and description of the licensed house; next to the treatment of the patients; then to an examination of the certificates, and more especially how far the patients were fitting or otherwise for removal to a lunatic asylum. Such were some of the principal duties he meant to devolve on the barrister commissioners."

It would be highly desirable, for a proper understanding of this extraordinary passage, to have a little insight into the private history of this bill, and by whom it was concocted. *Ignotus* boldly mentions that it was done "with the full knowledge of the commission, who are known to entertain a strong desire to extend their own power over the whole country." If so, where were the five physicians?—were they out-voted? Or being themselves safely seated at the commission board, and not finding it pleasant or profitable to make "circuits," did they forget the thousands of their brethren who are able, and might be willing to do so? I cannot believe that five gentlemen, holding the rank and station which they must do, could so far forget themselves. Will none of them in pity unlock the secret? However it was, let them beware! or, like the unfledged young of the poor hedge-sparrow, they will soon be edged out of the nest by the surreptitious offspring of the bird (cuckoo), whose voracious habits and gormandizing propensities lead them first to join in ejecting the rightful owners, and then to wrestle with each other, to the death, for sole possession. There is another pertinent question—with a secretary at £500 per annum (I know both physicians and barristers who have made less for the first seven years), what was the object of introducing paid barristers into the commission at all? It appears they were not there at first. I trust, that in the next number of your Journal, you will at least favour us with the names and designations of the twenty commissioners as well as of the secretary.

I must now refer to Lord G. Somerset's speech, and in drawing "a bow at a venture," neither intend to affect him personally or the other nineteen, who are all at present equally unknown to me. The tenor of the noble lord's observations, particularly in the last quotation, seems to me as if he had, in some unfortunate moment, been committed to make the worse appear the better side. In the first sentence we have the two barristers, like Minerva springing from the head of Jupiter, fully equipped; nothing could be more valuable than their services from the day they entered the commission; then the habits which they would acquire would be found most valuable; and lastly, their brethren of the commission in London would be a check to their proceedings in the country.

Passing over the evidently foregone conclusion, that barristers, and the two barristers only in the London commission, are to be appointed, the manner in which it is supported shows the tact of the advocate, orator, and statesman. An assertion is boldly made in favour of the superior habits of business and of exactness, not of the two barristers over the five physicians—such a thing is possible, though not very probable—but of the legal over the whole medical profession. Now, can this be met by a medical man by an assertion equally bold, but far more correct, to the contrary? Oh, no; I am an interested party; my evidence, therefore, is suspicious. Granting it otherwise, how can I or any professional man, endowed with a scintilla of delicacy of feeling, avow himself as a man of "superior habits of business," of "exactness," of "brilliant character," of "first-rate abilities?" The Lord Chancellor, Lord Brougham, Sir Robert Peel, Mr. Macauley, and some others, whom all acknowledge as first-rate orators, could not, under any almost conceivable circumstances, be induced to say so in *totidem verbis* of themselves. Even the noble lord would shun to avow that he is the most useful member of the twenty commissioners, paid or unpaid, though I may believe him to be so, and doubt not many others know it. The noble lord may have met with medical characters who, for the sake of eccentricity, notoriety, or other motives, may have boasted of a total disregard of regularity and ignorance of business habits; these are the real exceptions. I have met with several, but I never yet knew one of them take a distinguished or permanent place in the profession. Whom have we to rebut this? Mr. Wakley, himself attached to the profession. Where were or are the hundreds on both sides of the house who owe the preservation of their own lives, under God, or that of members of their families, to the skill and atten-

tion of our profession, who grumble if we are five minutes behind our time, even though arranged forty-eight hours before—who wait our arrival, and watch our motions, sayings, and doings, with the utmost anxiety—who pour out blessings upon our heads, little less fervent than the lower Irish, and, alas! apparently not more sincere, who, even in general business and private intercourse, know our punctuality—where was one of them in that house, no matter how he voted, to utter a word in our defence? And echo answers—Where? Or where the members for the different universities, whose peculiar province it is to defend the rights, maintain the privileges, and, if required, support the character of the learned professions, or, at least, discriminate between them when unjustly assailed? "Have the sons of Zeruiah," as Oliver Cromwell termed them, been too strong for us in that question also?

Tied to the stake as we are, my professional brethren will appreciate the motive, and forgive me, if I attempt a brief sketch of what I know to be common to nearly all in my situation. Well, to be "accurate," I left my father's home on the 9th of October, 1810, to enter upon the study of medicine; without keeping any regular diary, which many do, but from data and memoranda chiefly connected with my studies or profession, I will pledge myself to tell within £50 what I have received and paid, with dates, &c., from that day to this. I will point out not only where I was every day, but how employed; and in almost innumerable instances, what I was doing each hour, even down to minutes. Now this is no way remarkable, because it is part and parcel of our profession. During the last twenty-two years, I have attended, gratuitously, upwards of 30,000 pauper patients in the charitable institutions of Leeds,* of these, I shall give day and date of admission; of examination and subsequent visits; name, age, sex; in most instances, employment, disease, and result; with, in many instances, an extended history of the whole case. Now, I have this also in common, be the number of patients more or less, with every physician and surgeon attached to a medical hospital, in common with every medical officer of the army or navy, and in common with almost every respectable practitioner unattached to any public institution, but who must carry the same order into the range of his private practice. I have also given what is termed gratis advice to some thousands at my house, whose names, with a few particulars, I also retain. I need scarcely add, that few of us would be less "accurate" in the cases of our private patients.

The late Mr. Hey, of Leeds, who had the most extensive general practice in Yorkshire, a magistrate, and twice mayor of that borough, so arrranged his time, that for forty years he did not more than twice miss morning service at church, and only five or six times in the evening; and without alluding more particularly to his family, the same "business habits" are common to the other practitioners of Leeds, and of the West Riding.

I say nothing of the accuracy required in prescribing; a single error of a few grains or drops, might prove fatal; how rarely, how very rarely, does such a thing occur. *Ignotus* has touched upon this so ably, as to preclude the necessity of further remark. I shall make no inroads upon the legal profession; I claim no reprisals from the noble lord; but until it can be shown not by mere assertion, but stern irrefragable proof, that the education, and habits, and practice of the lawyer, compel equal, nay greater, accuracy, the allegation falls to the ground.

As to the supposed difficulty of obtaining medical men every way qualified for this, or any similar office, it is painfully cruel. There are many of my professional brethren, amiable, talented, and experienced men, who want the moral courage to make such a claim; there are a vast number more, equally capable, who, if it were known that they had offered, and were not appointed, it would certainly injure their present situation and prospects. But that the interests of humanity and the rights of the profession may not suffer, I shall engage to procure one or more able practitioners, which no board could fairly refuse on account of their qualifications or experience. Thus the noble lord is relieved of all difficulty on this point.

Are the two pet barristers such brilliant characters, and of such first-rate abilities? If they are, I hope the noble lord will consider well what he is doing. It would be a thousand pities to withdraw men of such transcendant abilities from the gleaming prospects of the woolsack, or the lustrous ermine of the lord chief-justiceship—though I do wish their present possessors may long continue to enjoy them. What! to send such rising Solons, in the words of the poet, "to skelp through dirt and mire"—to superintend among other things, the "medical treatment" in lunatic asylums? No, let Lord G. Somerset leave this more humble but important duty to the entire experience and persevering industry of the medical practitioner, who understands its requirements and will fulfil them; and, above all, to whom it justly, and in mercy to the poor unfortunates, ought, and by the laws of the realm, can only properly belong. If barristers are required to explain the law which they have framed, that law cannot surely require expounding at all times. It is much more consonant, then, to reason and common sense, that the medical inspector should submit such points to the lawyer when they arise, than that he, in his various and constant duties, should be put under the others' control.

Where is the difference between the unlicensed quack who is prosecuted, and the unlicensed barrister who may interfere with the "treatment," or even prescribe a nostrum of his own?

Mr. Wakley returned his thanks to the noble lord for having given his attention to the subject. He soon proceeds, however, in a much less complimentary manner. He expresses the disappointment he felt at the measure, that it was a "small measure indeed"—"too insignificant to admit of any disquisition at all." True to this centralisation principle and one faculty scheme, he wishes to have one great measure for England, Scotland, and Ireland, to stretch the poor lunatics of these kingdoms on the same bed without regard to the difference which he must know to exist even in the habitudes of madmen

* This enables me to explain a preceding passage as to the gratuitous services of the two professions of law and physic to the public. Upon an under average, a physician receives five guineas for each case he attends throughout attack—30,000 cases would thus give 150,000 guineas.

in these countries. The hon. gentleman then asks "What were licensed lunatic asylums? They were hospitals, houses of reception for the treatment of persons afflicted with the most grievous disease to which humanity could be subject. And what did the noble lord propose? To appoint two barristers as medical visitors to the hospitals. He did not suppose that the noble lord intended this proposition as an insult to the medical profession, but if it had been so intended, one of a more marked character could scarcely have been offered." Now this is excellent both in spirit and in manner, and differing as I do in many points from the hon. gentleman (the execution of his official duties as coroner are I believe above all praise), he has my best thanks, and I might venture to add those of the profession, for his prompt and chastened reply to the noble mover. Mr. Wakley then proceeds to notice other parts of the subject, entreating the noble lord to postpone the second reading to a distant day, and that he (Mr. Wakley) would bring the whole subject before the house, and he trusted with such success as to induce the government to appoint a commission to investigate the whole matter in the three kingdoms, previous to legislating upon the subject. Here I differ *toto cœlo* from the hon. gentleman, for all but the commissioners themselves and their immediate partisans have an utter abhorrence to these visitations in the country, nor is this feeling new, as in Henry the Eighth—

"There have been commissions
Sent down among them, which have flaw'd the heart
Of all their loyalties."

Besides, there is abundant information on hand, or which can readily be procured, for every legislative purpose, provided it is put into proper hands.

In the short speech of Mr. Hawes there are only two points which I need refer to. "He thought the measure so small as hardly to be worth producing. The appointment of barristers to judge whether a lunatic should or should not be detained in an asylum was absurd."—"If there must be a legal inspector at all a medical man should be joined with him." Obsta principiis is a sound maxim in medicine as well as in legislation. Of course, I agree with the hon. gentleman in the great absurdity of the barristers being appointed; one only lessens the evil, and does not remove it, besides forming a bad precedent.

If there is a gentleman in the House of Commons personally unknown to me, whom I have been accustomed to venerate and esteem more than another, it is Lord Ashley. I had fondly hoped, and do still trust, that the mantle, so to speak, of my lamented friend, the late Michael Thomas Sadler, had fallen upon his shoulders, in regard to various matters connected with the comfort and well-being of the poorer working class. In the present instance, however, the noble lord has followed in the wake of the other noble lord, and advanced propositions which I feel certain I am not alone in considering untenable. The noble lord refers more to the nature and treatment of insanity than the former speakers. Upon some of these points I should be happy to meet him, did my limits permit. After eulogising the metropolitan system in terms little inferior to Lord G. Somerset, and blaming the provincial one in the same ratio, he remarks, that "the former had not the power of tracing lunatics through the provincial houses, and, therefore, could not tell what was done with them. That power it was desirable they should have." Here is a desire for power, indeed! They have not the power of tracing the lunatics of France or America through their respective houses. But, if they really want information, by writing in a proper manner to the heads of the various establishments, I do not think they would be refused in a single instance. My experience at least goes to prove that every facility, nay, an anxious desire, is sometimes shown, both by the heads of public and private asylums, to give and show every information in their power. There is only one small private asylum near Leeds, kept by Mr. Hare, a respectable surgeon there. He has often pressed me to go through it, and to examine and give him my opinion of everything connected with it. I have been, for several years, in the habit of giving the senior students of the Leeds Medical School a practical lecture on insanity annually, at the large asylum at Wakefield, where Dr. Corsellis has always received us most courteously, has shown us the whole house, from the convalescents down to those in the very lowest state of idiotcy, and has replied, with the greatest good nature, to the various questions of my twenty-five or thirty inquisitive followers. I have met the same kind reception at York, where there are several; at Perth, where I happened to be last year; nor in these or all the other houses of a similar description which I have visited in the north of England and in Scotland, have I ever remarked (and I would have observed it) the least attempt at concealment. While the noble lord, however, is so anxious to extend the powers of the London commission, he twits Mr. Wakley upon the impracticability of establishing a uniform system for all the asylums in the country. There is another and a deeper point connected with this desire to "trace" them through different houses, which I am rather surprised that Lord Ashley has overlooked—the mental feelings of the friends of the patients, and of the patients themselves, when restored to health and serenity. This disease—for disease, in one form or another, it is, and one which I shall have a few words to address to his lordship presently—arising from the most varied, numerous, and opposite causes, and being often hereditary, apparently from no cause whatever, or these the most innocent, is yet, unfortunately, by all classes of society, as scrofula, &c., held to convey a degree of disgrace or reproach to the individual or to the family in which it occurs. Let not the noble lord, which I am sure he does not, or any one else, suppose for a moment that the middle and lower classes do not feel this most acutely; and, though limited circumstances may compel them to take their relatives to the public or licensed asylum, they always wish it done as quietly and privately as possible, and, where it can be afforded, uniformly to some distant one. This is my experience, at least; and further, I have known them removed again and again, to prevent them being recognised by neighbours or others, and this from no other or bad motive whatever. What, then, is the object or intention of all this "*tracing* through the different provincial houses?" Surely not to blazon in full length their names, the disease, the cure, the relapses, and the various houses they have

occupied, to figure in the columns of a bulky report drawn up by the two barristers. If it be this, or anything approaching to this, I pity the concoctors, and Englishmen will not submit to it long. If it is the mere "lust of power" in the twenty commissioners, irrespective of the barristers, it may be passed and laughed at.

But the most grave part of his lordship's speech is the following :—"With respect to the question of legal inspectors, he must say, speaking from the experience he had had in visiting these houses, that, although so far as health was concerned, the opinion of a medical man was of the greatest importance, yet, it having been once established that the insanity of a patient did not arise from the state of his bodily health, a man of common sense could give as good an opinion as any medical man he ever knew." I rejoice to hear of his lordship's experience ; and further, that he considers a medical man useful when the health is concerned. This, indeed, gives us the whole question; for it never has been and never can be established that the insanity of a patient did not arise from or depend upon the state of his bodily health. Even in cases of idiotcy from infancy, where the general health may be apparently good, original malformation and many other causes, as known to every one who has studied the subject, may and undoubtedly have prevented the regular and proper development of the mental faculties. The mysterious connection between mind and body has hitherto been, and will probably always continue, inexplicable; but it is as clear as any problem in Euclid, or that barristers are not physicians, that such a connection does exist, and that they mutually act and react upon each other, to the extent of not only producing diseases, of which insanity is one of the most remarkable, but in many cases to their amelioration and cure. In some cases of insanity there may have been no apparent cause sufficiently evident for its production, even to the most experienced practitioner, much less to Lord Ashley; but disease may, and in too many instances does, exist, even when its character is not fully developed. Again, insanity arising from such an obscure cause reacts on the body apparently in health, and too frequently leads to other and more serious disease, or develops the original cause more distinctly; in either case, then, the insane person is in an abnormal state, or, in other words, in a state of disease, which, according to his lordship's own showing, requires the attention of the physician. As to the latter clause of the sentence, it is one of those heedless, though entirely groundless, assertions which any public speaker might make, and which can only provoke a smile, though I should scarcely have expected it on such a subject from Lord Ashley. If he does persist coolly to maintain it, I must, with all deference, take the liberty to state, and shall presently prove, that he never was more mistaken. Did the noble lord never see or hear of monomaniacs? Some country people are so ill-bred as sometimes to say there are a few in the house. I did myself think that there were many such, both in the house and out of it, some ten or eleven years ago, but consider there are fewer now. Be that as it may, the most ingenious men living, with all the common sense of all "the Commons," are unable to detect them without a clue to the particular point on which they are insane. They may appear in good health, talk rationally, make out an excellent case for their confinement—what would the common sense man do in such a case? Blame the keeper, perhaps write out his discharge in a lawyer's best hand, and most accurately dated, &c., when the man would return home, and perpetrate the murder of one or more of his family, or some other atrocious crime, for the intention or attempt to do which he had been originally confined. Twenty instances of a similar kind rush upon my mind; our medical writings are full of them. But I must hasten to a conclusion. In cases of monomania, then, his lordship and all his people of common sense would not ascertain the cause or the state of the patient without information from the keeper or medical attendant. Take another and the last instance. I shall allow his lordship to select five persons of common sense, and add the two barristers to them, and I shall place five or seven persons labouring under insanity, with an equal number suffering from other diseases, as delirium tremens (temporary derangement from drinking, not requiring removal to an asylum), inflammation of the brain in certain stages, hysterics, and simulated insanity (not a disease, certainly, but extremely difficult and sometimes very important to detect); in one ward with the others, can the noble lord believe that the common sense party could distinguish these cases accurately, and give as "good an opinion," in regard to detention, admission, or treatment, as the five physicians of the commission, or any one of them, could do? Or does his lordship put the opinions of such men as Sir James Clark, Drs. Copland, C. B. Williams, Bright, Chambers, Holland, Marshall Hall, Elliotson, and hundreds of others, in town and country, on a level in a critical case of this obscure and protean form of disease, or of any other, with the untaught man of common sense? No, my lord, the thing is impossible; as the finest acre upon your lordship's estate will not grow a crop of wheat without cultivation and seed, so neither will your lordship and the chosen two become physicians without both study and practice. In regard to the signing of certificates, also, an alleged grievance in his lordship's address, I have never seen or heard of any difficulty in the North; but if this delicate and important duty is put into the hands of those who know nothing of the matter, doubtless there will soon be plenty.

Having thus, gentlemen, at greater length than I intended, but with much more difficulty to suppress than enlarge, attempted to do my duty to the profession, and to the poor suffering objects of this bill, at some sacrifice to my personal feelings, I leave the subject to other and more able hands.

I am, Gentlemen,

Your very obedient servant,

ADAM HUNTER, M.D.

Undercliff, Isle of Wight,
April 23, 1842.

*** From the great interest and importance of this subject, we have been induced to devote a considerable space to Dr. Hunter's communication.—EDS.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, MAY 7, 1842.

The poor-law commissioners are about to lay their grasp on the medical charities of Ireland, and we fear that, unless a very strong effort be made, the whole of the medical institutions in that country will be delivered over to the systematic oppressors of the medical profession.

Circumstances, to which it were needless to refer, have given rise to a system of medical relief peculiar to Ireland. The institutions devoted to the relief of the sick poor in Ireland are of three kinds—viz., county infirmaries, fever hospitals, and dispensaries. These are not supported, as is the case in England, exclusively by private contributions, but partly by subscriptions, and partly by a county rate. Thus the total annual income of dispensaries and fever hospitals is £98,301; of which £56,405 are raised by county rates, and £41,896 by voluntary contributions. The sum levied upon the county for the support of each dispensary is, we believe, equal to the sum raised by private subscription for the same object. The election of medical officers and the general management of the dispensaries are vested in the body of subscribers.

The system, of which we have thus given a very brief sketch, has excited the displeasure of the poor-law commissioners. Animated by an unbounded zeal for the welfare of the sick poor, they think it "highly objectionable that the establishment of any medical institutions for their relief should be contingent on voluntary subscriptions." The word "poor," be it remarked, does not here designate paupers, but the class of labourers and small occupiers of land placed immediately above them.

Again, the commissioners are shocked at the idea that any dispensary doctor should live ten or twelve miles from the extremity of his district; the dispensaries are too few, and in some places, where resident gentry do not abound, the districts are of inconvenient extent. These things are discovered to be evils in Ireland; in England they were regarded with indifference; that which was white here becomes black there. But, thus, it has ever been; reason and truth are pliant twigs in the hands of officials, who have a special object to carry.

"Seeing, therefore (say the commissioners), that the subscription system is defective in principle, productive of that want of harmony which too often, unhappily, exists in the managements of dispensaries and fever hospitals, and that it moreover does not ensure provision for a sufficient amount of relief, or for adequate arrangements in its distribution, the commissioners recommend that subscriptions be altogether discontinued, and that the funds requisite for these institutions be raised as a portion of the poor-rate."

Such is the pith of a proposition put forth by the poor-law commissioners, and which they are now intent on converting into a legislative enactment. The principle of "voluntary contributions" for the relief of the sick poor is, forsooth, a vicious one. The lords of the soil in Ireland have no compassion for their tenantry, while the commissioners' bowels yearn with benevolence and brotherly love. The men who cast a brand of discord amongst the profession in this country affect to admire "harmony" in Ireland; and, above all, the individuals who, under the pretence of economy, invented the tender system, and endeavoured to reduce the English practitioner below the rank of a menial, are ready to sacrifice £42,000 per annum for the purpose of bringing the Irish medical charities under their own control. Assuredly, the love of power is as accursed as the "thirst for gold;" yet shall we be the victims of both, if delivered into the hands of this power-seeking, place-hunting commission.

The scheme by which the commissioners propose to disqualify the benevolent and charitable inhabitants of Ireland from contributing to the relief of their afflicted brethren, is briefly this. A number of dispensary districts is to be formed in the different electoral divisions of the country, by the several boards of guardians. The funds for the dispensaries and fever hospitals are to be raised through the intervention of the boards of guardians—that is to say, are to become part and parcel of the poor-rates. The management of the institutions is to be entrusted to the guardians, perhaps to the clergy, and to a certain number of rate-payers, elected either by the guardians or their fellow rate-payers. In order to insure efficiency and economy in the conducting the numerous institutions thus brought into existence, the several boards of guardians and the poor-law commissioners are to be held responsible for the application of the funds, and the accounts must be subject to the same audit as the other accounts of the unions.

Finally, in order to assist the aforesaid boards of guardians and commissioners in the execution of duties of which they are profoundly ignorant, a medical charities' board is to be instituted in Dublin. The board, it is proposed, shall consist of five or seven eminent medical practitioners residing in the capital, but to prevent any unfortunate conflict between the board and poor-law authorities, its functions are to be purely *suggestive*—that is to say, five of the most eminent practitioners of Dublin are to assemble weekly, with a salary of two guineas a week each, for the purpose of *suggesting* measures which the commissioners may adopt if it suit their purpose. A hopeful avocation truly, and well requited.

After what we have said, it is almost unnecessary to add that the scheme of the poor-law commissioners

has met with the most active and determined resistance on the part of the profession in Ireland. Sir Henry Marsh, Dr. Stokes, and Mr. Cusack have proceeded to London to counteract, if possible, the Medical Charities' Bill, founded on the views of the commissioners. At a meeting of the Royal College of Surgeons, held on the 22d of April, a series of resolutions, condemnatory of the scheme, was unanimously adopted. The college express the utmost surprise and regret at learning that legislative measures are in preparation for transferring the government of the medical charities of Ireland to the poor-law authorities. The college affirms that the imperfections of the present system have been greatly exaggerated, and that the existing charities admit of being reformed, without destruction of their present organisation, and the substituting a plan of doubtful efficacy.

The college justly observes, that the proposal to sacrifice £42,000 per annum, derived from voluntary subscriptions, contrasts, in the most extraordinary manner, with the beggarly parsimony of the commissioners in their expenditure for the medical relief of the poor now entrusted to their care; and it regards such a sacrifice as uncalled for and wasteful. The present method of raising funds by county-rates is neither inefficient nor unpopular, and it would be premature and impolitic to abandon this method for a poor-rate, which may prove an unproductive or even an obnoxious tax. Finally, the college protests against giving the poor-law authorities power to remove the present fever hospitals and dispensaries from the situations which they now occupy, because such is equivalent to a power of appointing medical officers to these institutions.

The arguments of the college are conclusive, and cannot, we should think, fail to produce due effect.

At a numerous meeting of the Midland Medical Association of Ireland, resolutions to the same effect were also unanimously adopted. These measures will, we sincerely trust, induce the executive government to pause before it hands over the medical charities of Ireland to the poor-law commissioners. The scheme is, in truth, a most preposterous one. What would people in this country say if the commissioners proposed to abandon one half of the sums so munificently furnished by the English public for the relief of the sick poor, and to levy an equivalent through the poor-rate? The idea would be scouted, not only as an absurdity, but as an impertinence. What would the governors of our English county infirmaries and dispensaries think if the poor-law authorities were to come to them and say, "We will relieve you of the trouble and expense of these institutions; they shall henceforward be supported out of the poor-rate, and we will undertake the duty of managing them ourselves."

The commissioners are not yet quite barefaced enough to propose absurdities of this kind in England; like the political "shave-beggars," they commence with Ireland, where so many deeds of injustice and oppression have been done unheeded. But if their attempt be successful, who shall say where their pretensions will stop? The poor-law commissioners have, we firmly believe, conceived the hopeful scheme of bringing the whole medical profession of these countries under their jurisdiction. Already have they enslaved the union officers; their grasp is now firmly fixed on the medical charities of Ireland; and the time is probably not far distant when the independence of the whole profession in England will be attacked by an attempt to convert the poor-law commission into a permanent board of health.

LECTURE

ON

TWO NEWLY-DISCOVERED QUADRUPEDS, THE MYLODON AND GLYPTODON.

Delivered on May 4,

By Robert Owen, Esq., F.R.S., &c.

Mr. Owen delivered a lecture in the library of the College of Surgeons, on Wednesday evening, on the nature and affinities of the mylodon and glyptodon, two extinct animals, recently discovered in a fossil state in South America, specimens of which had been added to the museum within the last twelvemonth.

Mr. Owen introduced the subject by pointing out and demonstrating the application of comparative anatomy to the investigation of the remains of those animals, which have long since passed away from the theatre of animated nature. He gave a brief notice of the labours of John Hunter in this interesting field of research, and proceeded afterwards to speak more particularly of those of Cuvier, to whom a wide field of discovery was opened in the tertiary strata below the catacombs of Paris. To Cuvier we owe the principle by which alone fossil remains can be studied, the principle of correlation or co-existence of animal structure—as, for example, let a single bone be taken, the least significant, the last phalanx of the fore foot. The comparative anatomist will see, by its formation, if it has constituted a part of a hoof, and if so, he will know that the animal to which it belonged has lived on vegetable food, and having occasion to pass rapidly from pasture to pasture, the rotatory motion of the forearm would be useless, and he would consequently expect to find the bones fixed, and a corresponding modification of the humerus. The teeth, again, would be implanted in a particular form, and have flat surfaces for grinding the food, and the cranium be so shaped as to admit of the attachment of the muscles necessary for the grinding process. In addition, he would infer the existence of an alimentary canal, suited for the digestion of vegetable food. If, on the other hand, the phalanx was of the long claw shape, the forearm would possess the full rotatory power, and

the humerus and jaws would be modified accordingly; the teeth would be compressed, and let in between each other like the blades of scissors, so as to be adapted for tearing flesh; the cranium would be modified in shape, by an extensive origin for the temporal muscle; and the other structures in like manner for the digestion of animal food. Thus has the comparative anatomist been enabled to decide on the previous existence of large animals, both herbivorous and carnivorous, much larger than those of the same species in existence at the present time. Thus the remains of immense lions have been found in caves in Somersetshire, while in Yorkshire have been discovered the fossil bones of the hyæna, an animal which is now to be met with only in Africa. A huge species of bear, also, far exceeding in size the grizzly bear of the Rocky Mountains in North America, used to prowl over temperate Europe, proofs of which are met with even in our own country.

By the principle of correlation, Cuvier discovered and traced two extinct animals, the palœotherium and the anoplotherium. Among some organic remains which were presented to him, he received two varieties of grinding teeth, adapted for vegetable food, the hard substance of the enamel of the grinding ridges of which presented two distinct patterns, the one nearly that of the teeth of the rhinoceros, the other nearly that of the ruminant animals. Together with these were found some scattered bones, among which were astragali, presenting two distinct structures, the principal difference consisting in the anterior articulating surfaces. Where these were unequally divided, he considered that it indicated an unequal number of toes, as in the rhinoceros; when the division was equal, the number of toes was equal, as in the ruminant animals; and he concluded, accordingly, that the unequal surfaced astragalus belonged to the animal whose tooth resembled those of the rhinoceros, the other bone to the ruminant beast. In this way Cuvier constructed the animals, and his views and opinions were afterwards fully confirmed when the complete skeletons were obtained. After this, fossil bones acquired an interest they had not previously possessed.

The skeleton of the megatherium, now at Madrid, was discovered in tertiary deposit near Buenos Ayres, by the governor of which place it was procured, and shipped for Spain. Cuvier, from the descriptions furnished by the Spanish anatomists, decided it was a large herbivorous animal, having general indications of affinity to the sloth, but in the structure of the feet resembling the ant-eater—of the teeth, the armadillo. He considered that there were only four grinding teeth in the upper jaw; and, from information received by him during the latter part of his life, believed that it possessed a nearer resemblance to the armadillo, in being protected by a coat of mail, pieces of compressed bone having been found, which were united laterally by sutures. Of this Sir Woodbine Parish transmitted a specimen, which Cuvier believed to belong to the megatherium.

With the exception of pointing out its relation to the sloth, its vegetable diet, and its scratching up roots, Cuvier says nothing of the affinities of the megatherium. Sir Woodbine Parish sent one of its teeth, which, like the sloth's, has not any fangs, but has a large cavity underneath for the dental pulp, by which fresh layers of dental substance were secreted, to supply the waste caused by grinding the food. Another specimen, sent by Mr. Darwin, shows five teeth in the upper jaw, which teeth are identical in their internal structure with those of the sloth, these latter differing altogether from those of other animals.

The proportions of the colossal frame of this animal have been doubted by some anatomists, who consider the skeleton at Madrid to be compounded of bones from different animals. What was wanting to prove that this is not the case, has been supplied by the skeleton of the mylodon, which is almost identical with that of the megatherium, and, indeed, constitutes a sub-species, or megatheroid variety. It is a member of the same natural family. Mr. Darwin, who was the first to notice it in South America, sent a portion of the lower jaw, containing four teeth, which differ somewhat in form, but are the same in structure, as those of the megatherium. They are devoid of fangs, have a large surface, and the pulpal cavity, and are composed of the same three substances as the teeth of the megatherium, and have no true enamel. From these teeth, the conclusion would be drawn that the forearm was rotatory, the pelvis very large, and the head small, and from the zygomatic bone the same long process descending, owing to a modification of the masseter muscle, and so it is found to be. On examining the fore foot, the hoof and claw are seen to be combined, the only instance known of such an union; the posterior portion of the foot constitutes the hoof, the anterior the claw. The bones of the forearm admit of flexion and extension, of pronation and supination. They are bones of great strength, and, compared with the long, slender ones of the sloth, show they were intended for a different use. With these large bones of the forearm, there are necessarily large processes at the elbow for the moving muscles, a large scapula, and a strong clavicle. Before the discovery of the megatherium, the human being was the largest known animal possessing a clavicle. The pelvis is of enormous proportions, and apparently very strong muscles arose therefrom to move the trunk. The femur, tibia, and fibula are short, and of very great breadth; the hind feet are composed partly of hoof and partly of claw; and lastly, the tail is large and powerful.

The teeth tell us that the mylodon had the same food as the sloth, but it appears impossible that so large an animal could be so supplied with nourishment, while its immense strength better fitted it for uprooting and tearing down trees, than for climbing them. In the present state of creation, there are few mammalia that feed on leaves or trees, but such as do are of the largest size, as the elephant and giraffe. Now there is evidence in the cranium of the mylodon, that like the giraffe, it possessed a tongue of unusual size and strength, which is ascertained by the size of the foramina, through which are transmitted

the fifth and ninth pairs of nerves—judging from these, the tongue of the mylodon must have been at least four or five times as large as that of the giraffe.

By taking into consideration the principle of the correlation of animal structures, by examining the skeleton of the armadillo, the question whether this animal is provided with a coat of mail, can be decided. The superior oblique and transverse processes of the spinal column in the armadillo are exceedingly elongated, to give support to its coat of mail; but nothing of the kind can be found in the megatherium, and, as collateral evidence, may be taken the fact, that pieces of armour have never been found in conjunction with the remains of this animal.

But since then, there has been made a discovery of the remains of another large animal in South America, more nearly resembling the armadillo, and differing from the sloth. Its remains were found near Buenos Ayres, a country exceedingly rich in fossils, whence have been obtained, besides the megetherium, the mylodon, the megalonix, &c. Of this discovery, Sir Woodbine Parish was informed by a correspondent, and the President and Council of the College having been made aware thereof, took measures to secure it. They have now in their possession the coat of armour of this gigantic species of armadillo, the glyptodon, but the bones were too friable to be removed.

The examination of fossil remains supplies the information that, in ancient times, the primæval forests of Great Britain were traversed by the elephant and the mastodon, the lakes by hippopotami and anoplotheria, the marshes were occupied by the palœotherium and the rhinoceros, and the caverns by immense lions, bears, and hyænas. The remains of man have not been found in connection with any of these animals, unless accidentally introduced, nor in the tertiary nor antediluvian strata. From botanical and zoological facts, it may be concluded that the temperature of Great Britain, at this time, more nearly approached that of Paradise than it does at present.

Mr. Owen was greeted with considerable applause at the termination of his very interesting lecture, which was illustrated by a very fine skeleton of the mylodon, the coat of armour of the glyptodon, several specimens of fossil remains of the megatherium, and of the other animals which were alluded to by the lecturer, as also by some well-executed drawings. The library, in which the lecture was delivered, was exceedingly crowded, many of the members having assembled as early as eight o'clock.

NORTHERN HOSPITAL, LIVERPOOL.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I send you the "Liverpool Mail," of this day, which contains a short account of the election of a surgeon to the Northern Hospital of this town; an institution not yet of ten years standing, but which, from its being situated near the docks, has been found, and every day is more and more proved, to be a most useful charity, and an excellent school for practical surgery, from the formidable accidents almost daily taking place amongst the shipping of that locality. Indeed the usefulness has been so evident, that a second one, similarly situated, has been formed and opened at the southern extremity of the docks, within these last few months. The appointment and servitude of the medical and surgical officers are limited to about *ten* years, which I consider a great improvement, and justice to both the profession and the public; and I have not only been long of opinion, but expressed it privately and publicly, that no physician or surgeon ought to be elected to an hospital unless he will promise to give clinical instruction to medical pupils, both in and out of the hospitals, by lectures, whenever a sufficient class can be formed for that purpose; and for this, they should be encouraged by a small stipend from the funds of the hospital, aided by moderate fees from the pupils. This plan would secure for the public, in succession, judicious practitioners and skilful operators, and be such a stimulus to exertion amongst these officers, who may be appointed early in life, as to make them more indifferent about lucrative practice, until time, practice, and experience, entitle them to it. This impression of responsibility, I am inclined to think, is daily gaining ground; and, although, I am not aware that clinical lectures have been yet determined upon at either the Northern or the Southern Hospitals, some have been attempted at the Infirmary; and this, I believe, will speedily again be tried with some energy, and, it is to be hoped, more perseveringly.

I am, Gentlemen,

Your obedient servant,

Thomas Jeffreys.

Liverpool, May 2, 1842.

A meeting of the trustees of the Northern Hospital was held at the Clarendon Rooms, yesterday, for the purpose of electing an honorary surgeon for that hospital, in consequence of the resignation of Mr. Gill, who retired on account of ill health.

The Chairman having stated the object for which the meeting had been convened, called on the proposers and seconders of the respective candidates to proceed.

Mr. Henry Holmes proposed Mr. Joseph King, jun.

Mr. George Highfield seconded the nomination of Mr. King.

Mr. Richard Bateson proposed Mr. Ellis Jones.

Mr. Joseph Cooper seconded the nomination of Mr. Jones.

The Rev. Jonathan Brooks proposed Mr. William H. Bainbrigge.

Mr. Ambrose Lace seconded the nomination of Mr. Bainbrigge.

The poll was closed at three o'clock, when the numbers were—For Mr. Bainbrigge, 326; for Mr. Jones, 130; for Mr. King, 129. Mr. Bainbrigge was accordingly elected.

TINEA FAVOSA.

In the following plan of treatment, Dr. Petel, of Louviers, says he has imitated the plan of the brothers Mahon, as far as he is acquainted with it. He looks upon the absolute removal of the hair as a *sine quâ non* for a successful treatment. His remedies are prepared as follows:—12 grains of soda of commerce, 4 scruples of calx extinctum, and 120 scruples of lard, made into an ointment. 120 scruples of calx vivum, 8 scruples of powdered charcoal, made into a powder.

The hair is cut to within a quarter of an inch of the skin; the scabs removed by linseed meal poultices; and the scalp cleansed by alkaline lotions. This having been effected, the diseased parts are rubbed daily with the ointment, the lotions being repeated every six or eight days. After the lapse of a time more or less distant, the tinea becomes more rare, and then a pinch of the powder is to be scattered every second day among the hair, which will gradually lose its attachment to the skin, and can be readily removed. When all the diseased parts have been entirely denuded, the ointment is to be applied every two or three days.—*Bulletin de Thérapeutique.*

THE PROTO-IODURET OF IRON.

Dr. Dupasquier recommends the following formula for the preparation of the proto-ioduret of iron, which possesses this advantage, that it can be kept for an indefinite time without any extraneous mixture—that is, without the addition of any sugar or other conservative principle. The object is to keep the solution of the ioduret in constant contact with a great excess of iron. Take 50 grammes (2 ounces, 2 drachms, and 40 grains) of iodine, 100 grammes (4½ ounces and 4 scruples) of iron wire, and 400 grammes (rather more than a pint) of distilled water; cut the wire into pieces about an inch long, put them into an emery vessel, add the water and iodine, and stopper it. If some of the solution is required for immediate use, the bottle must be plunged, for about ten minutes, into water heated to 175″ Fahrenheit, shaking it frequently during the time. The quantity of the solution required must be filtered afterwards, when the liquid will pass colourless. If it be not wanted immediately, it should be set aside, and the combination of the iron and iodine will take place without the necessity for heat. The solution can be kept for any length of time, for as fast as one portion of the iron, dissolved by the iodine, becomes oxydized by the oxygen of the air, and is precipitated in the state of hydrate of sesquioxyde, the portion of iodine thus set at liberty re-acts on the iron wire, and forms a fresh proto-ioduret, to replace that which has been decomposed. The decomposing action of the oxygen of the air is then constantly neutralised by the recomposing action caused by the incessant contact of the metal.—*Bulletin de Thérapeutique.*

SYMBLEPHARON.

M. Pétrequin, of Lyons, the senior surgeon to the hospital, has performed a somewhat novel operation for the cure of this species of deformity, the result apparently, in the case recorded, of repeated operations for pterygium. A gentleman of Clermont, Savoy, was affected with pterygia in each eye, caused by chronic engorgement. In 1834, Mayor, of Geneva, operated on him, and the left eye was perfectly cured; the pterygium in the right, on the contrary, returned at the end of a month, and was attended with pain and some difficulty in the motions of the eye. The second time he was operated on by M. Maunoir, but with temporary success. The pterygium returned, and increased rapidly. Riberi, of Turin, who was next consulted, excised a portion of the caruncle with the pterygium, and applied caustic afterwards. This time fibrous bands formed, causing adhesion of the eyelids to the globe of the eye. These bands were excised by a physician at Chambéry, the operation being followed by large granulations, which were extirpated again and again, and finally repressed by the application of the sulphate of copper and nitrate of silver. Cicatrisation took place gradually, but at the same time there formed a mass of fibrous bands, disposed fan-shape, the base attached to the internal surface of the two eyelids, the apex extending to and terminating on the cornea, which it partially covered to the extent of two lines (1-6th of an inch). M. Pétrequin saw the patient in this state on the 10th of April, 1841, and on examination found the eyelids bound together and to the eye, by a multitude of dense, fibrous bands, which rendered their motion very difficult. When the patient looked outwards to the right he had double vision, as also, but in a less degree, when he looked much to the left. Cold, exposure to the air, reading, and writing were painful and fatiguing. He could not turn the eye outwards.

This case was not unattended with difficulty, in consequence of the great tendency to relapse and to an increase of the disease. Excision, incision, and the application of caustic, had already failed; a new operation was therefore requisite, which was performed in the following manner on the 13th:—A small curved needle, armed with a double thread, was passed between four or five of the fibrous bands of the lower eyelid and the globe of the eye, and the threads tied, the inner ligature being tied somewhat loosely. The operation was repeated the next day, the ligatures being placed external to those already applied. The eye was kept immovable, and bathed with cold water and laudanum. On the 15th the adhesions of the corneal side were broken; the part was touched with caustic alum, and a little charpie passed behind. The sulphate of copper was applied lightly the four following days; the other ligatures separated later; the lower eyelid was set at liberty, and became free and mobile, and a cure was effected. A similar operation was afterwards performed on the bands of the upper eyelid, but the results were not so successful. It was followed by a high degree of inflammation, requiring the application of leeches, mustard pediluvia, purgatives, &c., and when the patient left Lyons the eyelid was only partially freed, but its motions were more easy M. Pétrequin heard from him six months afterwards, and he was doing well. A few months later he was informed indirectly that the improvement the patient had experienced had not continued entirely. A second case, of an equally interesting nature, is recorded by

M. Pétrequin, in which the adhesion of the eyelids to the eye had been caused by the application of quicklime. The patient was a young blacksmith, and had been operated on seven times unsuccessfully previously to his placing himself under the care of M. Pétrequin. The adhesion affected the lower eyelid chiefly at the external canthus, but the commissure was also engaged; the motions of the eye were difficult and painful, and there was present a degree of strabismus convergens, with diplopia, imperfect vision, &c. The ligatures were applied four or five times, each successive application being followed by apparent improvement. The first was applied on the 11th of July, and when the patient left the hospital on the 30th the adhesions were entirely destroyed, and vision perfect, but cicatrisation was not quite completed. The patient was to return in September, if any contraction or difficulty of motion appeared afterwards, and, as he had not done so, M. Pétrequin concludes him cured.

The object of M. Pétrequin in applying a double ligature to these bands, tying one tightly, and the other more loosely, was, that the separation of the threads should take place at different times, so that the wound caused by the ligature tightly applied might be healed, or nearly so, before that to be produced by the more loose one, should be actually open, thus inducing cicatrisation of each separately, and thereby preventing their reunion. The portion of the fibrous band between the two ligatures could not form adhesions to either wound, inasmuch as it was in a state of strangulation, and must necessarily fall atrophied. The more dense and fibrous the bands, the more easy is it to cause a difference of several days between the separation of the respective ligatures, attention being paid to their being tied in different degrees of constriction. If the bands are very thick, the ligatures must be applied again and again, the needle being passed each time deeper and deeper. After the operation, it is requisite to keep the eye perfectly motionless and closed, to prevent those motions, which might cause traction on the eye, and separate the ligatures sooner than was intended.—*Gazette Medicale.*

VAN GESSCHER'S BOUGIES.

They consist of a strip of parchment rolled up so tightly that its layers adhere pretty firmly to one another, and they have at one end of it a knob or drop of glue, made of boiled parchment. This knob contributes very much to the facility of introducing the instrument into a stricture; one can feel it slipping in, and then, by the heat of the urethra, it melts, and the bougie unrolls of itself, while the melted glue is retained without injury to the urethra, and does not possess the slightest degree of any irritating quality. Such instruments may be manufactured of very small size, and yet possess sufficient strength; and their unrolling is rather advantageous than injurious, in consequence of the slow dilatation to which the stricture is thus subjected.—*Dr. Arntzenius on the Diseases of the Urethra.—British and Foreign Medical Review.*

ORDER OF LIABILITY OF ORGANS TO INFLAMMATION.

All organs and parts are not equally liable to inflammation. The following is the scale of the order of liability of the various tissues to this form of morbid action:—Cellular tissue, skin, mucous membrane, serous membrane, lungs, liver, and the other parenchymatous glands; then muscle, the great blood-vessels, the nerves, the synovial membranes; lastly, and most rarely, tendons, ligaments, cartilage, bone. Schönlein is of opinion that parts, in which the arterial predominate over the venous vessels, are the more liable.—*British and Foreign Medical Review.*

THE RESIN OF JALAP.

The process of displacement is also economically and advantageously applied in obtaining the resin of jalap, which, by these means, may be more completely extracted from the root, and with a much smaller quantity of alcohol than in the other way. If, in operating upon the jalap, it be mixed with about its weight of purified animal charcoal, and then submitted to the action of the alcohol in a displacement apparatus, the resulting tincture will be much less coloured than if obtained without the use of the charcoal; and the resin precipitated from this tincture, by adding a large proportion of water, or by distilling off the spirit, will be of a light amber colour, and, indeed, when dried and powdered, will be nearly colourless.—*Pharmaceutical Transactions.*

CAUSES OF HEMATEMESIS.

This kind of hæmorrhage happens under various circumstances, and is attended with different degrees of danger. 1. The bleeding may be idiopathic; 2, it may be vicarious of some other habitual hæmorrhage; 3, it may depend upon disease or injury of the stomach itself; 4, it may be the consequence of disease situated elsewhere, and producing, mechanically, a plethora of the veins of the stomach; 5, it may result from a morbid condition of the blood, and form one symptom of a more general disease, as in the passive hæmorrhages of purpura and sea scurvy.—*Dr. Watson.*

FIBRINE.

The fibrine which is held dissolved in the serum of the blood and of the lymph, may be regarded as the general formative element or blastema—that principle which, under the influence of the primary and secondary organic processes, is fitted to assume all the shapes which we observe in the constituent parts of animal bodies. Fibrine left at rest, consolidates, under all circumstances short of those which act by decomposing it, first into a determinate hyaline substance, which, in the greatly debilitated, and in the dead body, and also out of the body, when left to itself, falls into granules, or forms an aggregated granular mass. When it coagulates in contact with the interior of the living body, immediately higher organic processes are proclaimed in the formation of compound corpuscles, which either swim free in the fluid, as the globules do in the blood, or they appear as isolated bodies disseminated through a hyaline substance, or variously arranged without any common bond of union, and so obtain their final development; or they present themselves as mere transition forms of more highly organised products, which, with the final completion of the development, disappear entirely.—*Gerber's Microscopic Anatomy, by Gulliver.*

BITE OF THE CHUNDUN GOO.

This animal, which is one of the lizard tribe, and is supposed to be a species of monitor, inflicts a bite,

which, according to the report of the natives, is more rapidly fatal than that of most snakes. Mr. Machell, surgeon to the 9th regiment, fully confirms this statement, and his remarks have been corroborated by others. He says, "During the time I was civil surgeon at Kaira (Guzerat), I saw a number of the animals in question, and killed several. They are generally to be found in trees, particularly the nimb, and also in the roofs of old houses. The natives appear to be more afraid of them than of the most poisonous snakes, and assert that they will spring upon any person who may be passing near them, and that the bite is followed by almost instant death. Having examined the mouths of three chundun goos of the largest size with a magnifying glass, and not having been able to detect the presence of poison fangs, I was disinclined to believe this; but one evening I was called to see a woman, living in the Wagaseerce (about 500 yards from my own house), who was said to have been bitten by a chundun goo. My horse being ready saddled at the door, I reached the woman's house within five minutes from the infliction of the bite, but by the time I arrived there she was dead. This occurred in 1832.

Very shortly afterwards a coombie (cultivator), residing at Hurecala (about three quarters of a mile from my house), was also bitten, and, although I was almost instantly on the spot, I found him also dead." *London and Edinburgh Monthly Medical Journal.*

CONDUCTORS AND NON-CONDUCTORS OF ELECTRICITY.

The bodies, comprising the following series, are arranged in the order in which experiment has shown them to possess the conducting power, the most perfect conductors standing at the head, and the most perfect non-conductors at the conclusion of the series:—

Conductors.—All the metals, well-burnt charcoal, plumbago, concentrated acids, powdered charcoal, dilute acids, saline solutions, metallic ores, animal fluids, sea water, spring water, rain water, ice above 13° Fahrenheit, snow, living vegetables, living animals, flame, smoke, steam, salts voluble in water, rarefied air, vapour of alcohol, vapour of æther, moist earth and stones, powdered glass, flowers of sulphur.

Non-Conductors.—Dry metallic oxydes, oils (the heaviest the best), ashes of vegetable bodies, ashes of animal bodies, many transparent crystals (dry), ice below 13° Fahrenheit, phosphorus, lime, dry chalk, native carbonate of barytes, lycopodium, caoutchouc, camphor, some silicious and argillaceous stones, dry marble, porcelain, dry vegetable bodies, baked wood, dry gases and air, leather, parchment, dry paper, feathers, hair, wool, dyed silk, bleached silk, raw silk, transparent gems, diamonds, mice, all vitrifications, glass, jet, wax, sulphur, resins, amber, gum-lac.—*Lardner on Electricity.*

UNRECOGNISED PNEUMONIA.

A gentleman, bordering on 60, after exposure to cold, was attacked with the ordinary symptoms of fever. Dr. Taylor saw him only after he had been ill some days. He was considered by his medical attendants (who were very intelligent men, but were not acquainted with the physical signs furnished by the state of the chest) to have typhus fever, and was allowed wine and pretty good nourishment. When he visited him there was considerable prostration of strength, headache, delirium, great heaviness in the expression of the countenance, dry and loaded tongue, frequent, soft, and rather small pulse: so far it appeared to Dr. Taylor, also, that the case was one of fever. The patient made no complaint of his chest; but it was found that he had some cough, which, as he was said to have been asthmatic, had not attracted much attention. On listening to the chest, however, he found proofs of an acute pneumonia, occupying the whole of the left lung; there was either bronchial respiration or a characteristic crepitation in every part of it, and over a considerable extent a dull sound on percussion. On further inquiry he had found that there had been viscid and rusty expectoration for several days. The patient was now cupped on the chest, and ordered tartar emetic in grain doses, and at short intervals. Under this treatment the symptoms improved, the expression of the countenance became less heavy, the intellect more clear, the crepitation passed into a muco-crepitant rhonchus, and became less abundant, and hopes of recovery began to be entertained. At last, however, his strength failed, and a profuse secretion, which he could not expectorate, taking place suddenly into the bronchial tubes, he died asphyxiated.—*Lancet.*

VENTRAL HERNIA.

A beggar, 42 years old, who had led a hard life from infancy, had a large abscess form at the umbilicus, which burst, gave vent to a great quantity of pus, and to a portion of epiploon, which, however, readily returned on his assuming the horizontal position. The wound cicatrized, but a hernia followed, and, as the man did not wear a truss, it increased in size, and the hernial opening was so large that the hand could be introduced into the abdomen. Some time afterwards a similar abscess formed on the external edge of the right rectus abdominis, followed by a hernia; and this again, in like manner, by an abscess and intestinal rupture on the left side. A year afterwards a fourth abscess formed below the umbilicus, which was succeeded by a hernia of the omentum, which adhered to the vicinal parts, and did not protrude. All this took place without the man leaving work or seeking medical assistance. One day in July last year, after a full repast, while ascending a staircase, he was seized with fainting and vomiting. On examination, it was found that the left ventral hernia had burst, and a portion of the ilium was protruded. M. Pellizo, who was sent for, succeeded in replacing the protruded gut, and cicatrisation took place without the occurrence of a single bad symptom.—*Annali Universali di Medicina.*

AMPUTATIONS FOR DISEASED BONE IN CHILDREN.

M. Tavignot states, as the results of his experience, that amputations ought not to be performed on children, as long as there is hope of preserving a limb, which may yet be of some service, unless the powers of life are endangered by colliquative diarrhœa. If the disease be more dangerous than the operation, then the latter should be had recourse to, and not otherwise. M. Tavignot denies the necessity of amputating, when the disease in the bone is entirely circumscribed, even if there be sequestra and fistulous canals, because either the original cause of the dis-

ease, the strumous cachexia, may disappear, and the disease with it, or, if it continue, an affection similar to that for which the operation was performed will be developed elsewhere.—*La Clinique des Hôpitaux des Enfans.*

DOUBLE UTERUS.

M. Dumas has collected the details of several cases of double uterus, from which he draws the following conclusions:—First, the menstrual secretion may take place from one part of the bifid uterus, it being unimpregnated, while the other side is occupied by an embryo. The woman may be pregnant in the right uterus, and virgin in the left, or vice versâ; and again, she may be in labour on one side and pregnant on the other. Superfetation may take place not only when each side of the double uterus has a neck and os tincæ, but when both sides of the bifid organ terminate in one neck and orifice; and notwithstanding the absence of anatomical proof, still this ought to be admitted as a fact in forensic medicine. Although it is impossible to say that each side of a double uterus cannot enlarge sufficiently to carry a fœtus to the full term, yet it is reasonable to expect abortion to be frequent. The existence of a double uterus will render labour more laborious, as also the delivery of the placenta, and increase the danger of laceration. The two sides of the bifid organ do not exert reciprocal influence.—*Journal de la Société de Médicine Pratique de Montpellier.*

POISONING BY OPIUM.

An inquisition was held by Mr. Wood, on April 16, at Debenham, on Susanna Amass Bendall, aged three years (daughter of Dennis Bendall, of that place, wheelwright), who died on the preceding day. It appeared in evidence that, in consequence of this little girl being troubled with worms, her mother sent on Thursday afternoon to John Cunnell, who sells drugs, for two worm powders. Mrs. Bendall gave her daughter one early the following morning, who was shortly after seized with excessive drowsiness, and, from other strange symptoms, Mr. Locke, surgeon, was sent for, and he immediately pronounced that she had taken some narcotic poison; he administered an emetic and used the stomach pump, but she died about one o'clock, six hours after taking the powder. Inquiries were immediately set on foot, and it was discovered that Cunnell, instead of sending seven grains of rhubarb mixed with two of calomel, as he intended, had sent nine grains of pure opium. Verdict, "Accidental death from taking of opium by mistake." The inquiry occupied several hours, and the coroner, at the request of the jury, and a magistrate, who was present, gave Cunnell a severe reprimand for his gross negligence and inattention, and advised him to discontinue selling such dangerous drugs. It is much to be lamented that persons should be suffered to sell medicine without previously passing some examination as to their qualifications.—*Ipswich Journal.*

OBITUARIES.

With extreme regret we have to announce the death of Sir Charles Bell, which took place suddenly last week, near Worcester.

On April 9, at Hyeres, near Toulon, Dr. Andrew Blake, of Dublin.

At George Town, Demerara, Ewen Maclauren Smith, M.D.

Sir W. Beatty, M.D.

Matthew Chalmers, M.D., senior physician to the Hull Infirmary.

Sir John Meade, late inspector-general of hospitals.

PROMOTIONS AND APPOINTMENTS.

War-office, April 29.

20th Foot—Henry Howard, gent., to be assistant-surgeon, vice Menzies, appointed to the 94th.

NAVAL.

Surgeons—James Little, to the Cleopatra; Dr. James Brown, to the Talbot.

Assistant-surgeon Hugh O'Hagan, to the Skylark.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted on Friday, April 29, 1842.

Francis Robert Trumper, Charles Wakefield Jenner, Charles George Mott, James Croft, William Mills Dowding, Richard Willis, Evan Evans, Thomas Frederick Holrige, Charles Thomas Wills, Edwin Hearne, George Everest.

Monday, May 2, 1842.

Samuel Maltby, Edmund Cockey, Charles Pooley, Frederick William Johnson, Henry Young Chapman, William Martindale, Robert Wilson, Leonard Buckell, Charles Richard Jones.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, *Strand, London.*

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TO CORRESPONDENTS.

In consequence of the length of one or two articles in our present Number, we have been compelled to omit several communications, &c.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
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PROVINCIAL MEDICAL JOURNAL

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VACCINATION DEFENDED AGAINST THE ATTACKS OF MR. BROWN.

Letter II.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—In resuming my analysis of Mr. Brown's letters, perhaps it will be unwise to pass over in silence the queries which conclude his first letter, and which I propose to answer in this place summarily, because they will yet come before us for more detailed reply in a subsequent part of our investigation.

1. Is the preservative power of vaccination against small-pox absolute, or only temporary?

Answer. It is not *absolute*, because failures frequently occur, but it is relatively greater, far greater, than inoculation; and it is not temporary.

2. To determine the precise time which vaccination defends against small-pox.

Answer. Its preservative influence is not impaired by time.

3. Has recent vaccine virus a more certain or permanent preservative power than that which has been employed in a greater or smaller number of vaccinations?

Answer. It has not; the lymph of a genuine vaccine vesicle possesses now the same properties which a genuine vaccine vesicle possessed forty years ago, although such lymph may have been handed down successively through an unbroken series of human vaccinations.

4. Is it necessary to vaccinate the same person several times? and if it be, after how many years should the vaccination be repeated?

Answer. It is unnecessary—nay, more, it is useless and mischievous, except as affording a test of the constitutional influence of a first vaccination.*

5. Supposing that the vaccine grows weaker by repeated use, should it be renewed, and by what means?

Answer. Already answered in the reply to No. 3.

6. Are there any means of rendering matter, or virus, obtained through the medium of the cow, an absolute or permanent preservative against small-pox?

Answer. Considering that, in the greater number of cases, vaccination affords both an absolute and permanent preservative against small-pox, it is more than probable that if this process were perfected, and freed from the little circumstances which produce failure, and more carefully attended to, it would become an absolute and permanent preservative in all cases, except those few which seem to form the exception to the general rule, in the case of all specific diseases.

* See paper on this subject read at York, and published in this Journal Aug. 28, 1841.

Having now disposed of these questions, I proceed to Mr. Brown's second letter.

We here find Dr. Jenner's paucity of experience, imperfect knowledge of the malady, and mistakes about the equine origin of cow-pox, employed as an argument against the remedy itself. Now, nothing can be more unphilosophical or unjust than to expect that a discovery will be perfected at once, or to charge the errors and want of experience of the discoverer as proofs of the inefficacy of the discovery. Discoveries have been generally made by accidental circumstances; the falling of an apple led Sir Isaac Newton to the discovery of the laws of gravitation, but he did not at once see all the consequences which would result from this discovery; and subsequent investigators have done much to perfect his theories, and show their enlarged applicability. The first rude notion of a steam-engine could not be considered as perfected, but its imperfections are not to be charged against the power of the discovery; and this answer will apply to very many of Mr. Brown's remarks; it is only surprising that he should have overlooked the progressive law of perfection which attaches to Nature's processes, where they are to be improved by art, and human ingenuity, and much labour; and it is still more surprising that he should have overlooked the doubt that this should have thrown over his own peculiar views. An individual who finds fault should be doubly cautious of the accuracy of his own reasoning.

We may then assume, as a conclusion, that the imperfections of the discovery do not militate against the value of that discovery when perfected, but that they only call upon the individuals interested to throw all their mental energies, all their powers of observation, all their most serious thoughts, all their unbiassed judgment, upon the one great object of perfecting this invaluable process.

I am quite disposed to allow that Dr. Jenner was in error as to the equine origin of cow-pox, and also as to the liability of individuals to have the vaccine disease both locally and constitutionally again and again.* Mr. Brown admits this to its fullest extent; but he does not perceive the inference, that if the constitution be thus protected for ever from another attack of vaccination, the efficacy of the first could be exhausted by time. If a first vaccination be a perpetual protection from succeeding attempts to vaccinate, so also, if it be a protection from small-pox at all, is it a perpetual protection, because by the proposition its influence is perpetual, not temporary, as, indeed, the analogy of all science would show, as well as the results of unprejudiced experience, except in the small number of cases which constitute the exception to the rule; and probably the greater proportion of that small number might be accounted for by igno-

* See paper before referred to.

rance or carelessness, or a want of the fulfilment of some of the necessary conditions on the part of the vaccinated or the vaccinating.

It seems unnecessary to notice Mr. Brown's objections to vaccination, on the ground of the supposed identity between small-pox and cow-pox. The question is not practically whether it be small-pox itself, so modified by passing through the constitution of the cow as to lose its malignant properties, or whether it be a specific malady, and an antidote to small-pox; but whether, either according to the former or the latter speculative formula, it affords a protection, and the best protection which can be obtained, against the malignant influence of small-pox. It is not, however, wise altogether to overlook the theories of an author, since they cannot but exert an influence upon his reasonings and his observations. Mr. Brown, then, thinks the specific nature of vaccination to be sedative. Well may we ask upon what data is this opinion founded? An observer of the malady from first to last would distinguish that it is essentially irritant, from the first blush, which indicates that the poison has taken effect, to the height of the malady, with its beautiful, well-defined areola on the tenth day, and the symptoms of constitutional irritation which may always be detected in a milder or severer form. It is easy to understand Mr. Brown's reasoning; he sets off with the hypothesis that the influence of vaccination is temporary; sedative influences are usually temporary, and pass away; therefore, the influence of vaccination is temporary, because it is sedative! From such hypotheses, however, we appeal to facts. Our only inference is, that the argument of a philosopher who thus reasons backwards from hypothesis to facts, or assumed facts, must be received with the utmost caution.

Again, Mr. Brown impugns the efficacy of vaccination, because it is required to take the lymph for successive vaccinations on one particular day, and because of the necessity of some other minute attentions. The neglect of these attentions has, doubtless, been the cause of Mr. Brown's failures, and of his fallacious reasonings thereupon. We do not claim infallibility for Dr. Jenner; we believe that he wrote many unwise things, and that his knowledge of his discovery was imperfect. But we would ask, is there anything extraordinary in the supposition that vaccine lymph should have reached its maturity on the eighth day, and that it should be impaired by the common inflammation with which it is associated after that day? Is there anything extraordinary in the supposition that the perfection of a very mild process, unattended by violent symptoms, should be secured only by the presence of some minute phenomena, which, in the case of a severe malady, might be overlooked, because unimportant? And is there anything extraordinary in one disease of the skin superseding another? On the contrary, may not each one of these inquiries be answered in the negative, and, if so, of what avail are all Mr. Brown's reasonings thereupon?

Mr. Brown next summons Mr. Bryce as a witness to support his views of the inadequate protection afforded by vaccination, but unfairly, especially towards those who have not known the history of vaccination. Now, Mr. Bryce wrote under the influence of the very laudable desire to save uninstructed or careless persons the trouble of careful watching, in order to determine whether the effect produced by the vaccine vesicles were simply local or thoroughly constitutional, since it was allowed on all hands that, according to every analogy, it was the constitutional influence only which could be relied upon as affording protection; and hence, a test of such constitutional influence became a great desideratum. Mr. Bryce imagined that he had found this test, in his very ingenious proposal to vaccinate a second time in the other arm on the fourth or fifth day after the first; then, if the areola was found around these late vesicles on the same day with the early ones, he considered this afforded the desired test of constitutional influence. But it was found that certain appearances on the first arm would always be attended by certain appearances on the second; there were many objections against the process; it added nothing to the patient's security; and, above all, it withdrew the attention of the practitioners from minute attention to the progress of the malady; hence, the practice early fell into disuetude. But, let me ask, what have the errors and failures of practitioners, however distinguished—what have these errors and failures to do with the perfection of the process over which they have ignorantly blundered? This will serve also as a reply to several other errors which Mr. Brown has accumulated, but for which vaccination is not answerable, but its professors.

We need not follow Mr. Brown into his strange assertion of the all but identical progress of the vaccine and variolous inoculations, nor into his inquiry as to whether the influence of vaccination is produced upon the nervous or vascular system; we would only remark, with regard to the former, that perhaps all Mr. Brown's reasonings and observations may really, after all, be dependant upon some unlucky substitution of variolous matter for vaccine lymph.

Here, Gentlemen, I must take my leave of the subject for the present, hoping to resume it for next week.

Faithfully yours,

W. Newnham.

Farnham, May 3, 1842.

EXTRACT

OF A

LETTER FROM DR. A. MUHRY OF HANOVER,

TO

DR. JEFFRIES OF LIVERPOOL.

Nothing or little new has happened on our special question of the identity of cow-pox and small-pox in Germany last year since I gave a view of the state of the question in my book. I have mentioned already the experiments of Dr. Reiter, physician in Bavaria, who variolated fifty cows, and once succeeded in getting a pustule, the matter of which he employed on a child, and succeeded here likewise in producing pustules, but then, alarmed by a secondary eruption of vesicles, he took the disease for variola, and discontinued the propagation. The experiment was, however, as it were, accidentally continued, and afforded a most valuable proof of the identity. The cow which had produced the pustule stood in the same stable with another, and the latter about three

weeks afterwards showed excellent cow-pox. The same happened in another stable, and from both these infected cows children were inoculated, and showed very fine, well characterised cow-pox. This observation, though not taken as a proof by the author himself, is fully entitled to be added to the experiments of Thiele and Cely in favour of the question. As the number of them is small, though against the question no proof by experiment sufficiently described exists, it is of value to have more. Therefore, a very early experiment of Dr. Gassner, in the year 1801, of which only a few lines' notice had been given by the late author, was, in the hope of further explanation, inquired into by Professor F. Heim, and the report of which he just published in the last number of "Henke's Zeitzchrift für Staatz Arzneikunde," 30th supplement, 1842, and I trust he will allow it to be communicated in an extract to you. Gassner lived at Günzburg, near Ulm, in the kingdom of Würtemberg; the short notice given, in the year 1807, of his experiment, was this (Salzburgher Medic. Zeitung, No. 67) :—"Dr. Gassner has inoculated several cows with the lymph of small-pox, and eleven have got cow-pox; with the matter produced in this way four children were inoculated, and very fair cow-pox was obtained." Professor Heim has succeeded in detecting more evidence of this interesting fact, by finding out that an inquest has been held on the said affair in the year 1807, on which occasion Gassnar has stated that he has made his experiments (1801) on eleven cows, the eleventh only giving the result of cow-pox, and that he had with that lymph inoculated four children of a clergyman, and had observed the same form as described to be characteristic of the genuine cow-pox, which at that time he only knew by description; the same occurred in seventeen other children, but then he lost the lymph with the right time of its further propagation. It must be mentioned that he performed all this without the consent of the proprietors of the cows, and that the parents of the children did not know the source of the lymph used for vaccination, hence all was done and kept secret by him. Professor Heim has found another account, given by the experimentator in a letter to Dr. Ehrard (Sammelung von Beobachtungen, 1 vol., 1803), which is very short likewise, and gives the same statement, without any further addition of importance to the fact. Gassner died on the 19th of June, 1841, and not without having heard in the last months of his life of the successful variolation of the cow newly made in England, and then the old man of 76 years, as is recorded by his son, rose from the chair he was sitting in, and in full joy protested against the priority of the experiment, and mentioned again that he had done the same more than thirty years before, but that this at that time had not been understood, that he had been called almost a sorcerer, and had been prohibited from all further inquiries.

If you find this notice interesting enough, and I think it may be worthy of notice in the "Provincial Medical Journal," I have nothing to say against its publication when an English hand will have mended the Germanisms of the style.* I hope to be able to give you another foreign communication. Every new truth wants time for its reception, and so does now the identity of cow-pox and small-pox. In England Dr. Gregory seems to be at the head of the opposition, and in Germany Dr. F. Heim may be called so, but seems to be on the point of going over to the other opinion, and certainly he would be, by his authority, a highly estimable ally.

Yours, faithfully,

Dr. A. Muhry.

Hanover, April 12, 1842.

* We have had occasion to make very few corrections in Dr. Muhry's letter.—Eds.]

CASE

OF

PROSTRATION OF STRENGTH

WITHOUT OBVIOUS CAUSE.

By Edward Oct. Hocken, M.D.

Observing a case of this kind detailed in the "Provincial Medical Journal," for April 2, by Mr. Toogood, I am induced to extract a very interesting example of the same from my note-book, the case of a lady whom I attended recently. The particulars are as follows :—

Mrs. D * * n, aged 35, is of the melancholic temperament, small build, and in easy circumstances; she has suffered but little from any indisposition since her childhood. She states that, from the death of two of her husband's relations, and some other family circumstances, she had been fagged and excited more than ordinary for the last two or three months, continuing, nevertheless, very well in health until about a fortnight since (from March 12, 1842), when she felt her strength suddenly leave her—to use her own expression, "she found herself sink at once." Her sight (which had never been very strong) and hearing became very imperfect at the same time.

March 12. When I saw her, professionally, for the first time, she complained of an excessive feeling of sinking and muscular weakness, and a tendency to lowness of spirits. If she made any effort to employ either her mind or body, and sometimes even without this, she became confused; had a most unpleasant noise in her head, which she likened to the clashing and confusion on a railroad, with singing in her ears; these, after continuing some minutes, would stop suddenly, and leave a most painful sense of stillness, with very imperfect vision and hearing. From this latter distressing condition she generally soon recovered, provided that she remained perfectly quiet; her sight and hearing being restored partially, although they remained constantly confused and imperfect. She had no pain in the eyes, head, or brows, and the eyes appeared natural, but, if anything, more glistening and bloodless than natural; her pulse was slow, full, and very compressible; the expression of her countenance denoted anxiety and excessive langour, being somewhat emaciated, and appearing to want the normal support of muscular tone, but there were no indications of anæmia; and her lips and the lining membrane of the mouth were of a healthy vermilion colour; irides dark-coloured.

She stated that her appetite and digestion were good; her bowels regular, though at present somewhat confined; slept well at night; in fact, that all

her secretions and excretions were healthy, and that she had no discharge of blood from any source. I directed for her the following mixture :—

Disulphate of quinine, sixteen grains;
Dilute sulphuric acid, one drachm;
Infusion of orange peel, eight ounces. An ounce thrice a-day.

Rhubarb and sulphate of potass, of each, ten grains. A powder, to be repeated when required.

14. Has had a good night's rest, and feels less depressed than she did the day before yesterday; her pulse is stronger, and her vision improved.

15. Feeling a good appetite at dinner, she had partaken freely of mackerel, &c., and afterwards eat a few walnuts. About half an hour afterwards she was seized with great depression of strength, coldness of the extremities, feeling of faintness, and cold clammy sweating, which continued all the evening. About eleven, p.m., I was sent for, and found her faint, cold, and with a scarcely perceptible pulse, complaining of blindness and deafness, of nausea, and an assurance that she was about to die. I directed her to have some hot brandy and water, and a mustard emetic to be taken immediately, to be followed by the subsequent powder as soon as the emetic had ceased acting.—Rhubarb, ginger, and sulphate of potass, of each, ten grains, and a drachm of the cordial and stimulant drops, I am about to mention, during the attacks of leipothymia—viz.,

Compound tincture of cardomoms, and aromatic spirit of ammonia, of each half an ounce. To take a drachm whenever faintness comes on.

16. Much improved since last night; pulse much fuller and stronger; no return of faintness; vision and hearing improved. Continue the remedies.

17. She feels much more cheerful to-day, and professes herself to be much better and stronger; she says that she has completely lost the confusion in her head, the ringing in her ears, and deafness, with the occasional attacks of blindness, which were so troublesome a few days back. The continued imperfection of vision is also now much less than then. Continue the medicine. An aperient powder when required. I modified the method of administering quinine, and directed the following pills:—

Calomel, six grains;
Quinine, twelve grains;
Soap, half a drachm. Twelve pills, one thrice a-day.

19. Found her employed in domestic affairs; she stated herself to be much improved in feelings and strength, and has had no return of the confusion and unpleasant sensations in her head. Her hearing and vision are now as good as usual. She has emaciated considerably within the last fortnight. As regards her vision, she informed me that she had lost "the cloud" before her sight; but that a form of indistinct vision from which she had previously suffered, even from a child (nearly thirty years), especially from excitement, had returned—viz., that on first regarding objects her vision was good and perfect, but that on employing her eyes, even for a short time, especially if it required careful sight, all objects seemed to run together, and she was obliged to desist. Continue the remedies.

23. Feels herself nearly as well as before the attack; spirits good; strength normal; emaciation less; has lost all morbid symptoms. Pills less frequently.

29. Completely recovered.

REMARKS.

Pure idiopathic debility is doubtless an extremely rare affection, so much so, that it becomes every judicious physician to examine carefully into the condition of each and all of the various animal functions, the aggregate of which constitute life, as well as of those contingent circumstances which are capable of acting on the nervous or vascular systems either separately or conjointly. In the great majority of instances some efficient cause will in this way be detected, and these causes may be divided into three classes :—First, those which act on the general nervous system alone; secondly, those which act on the vascular system (the blood) alone; and thirdly, those which affect both at the same time. To follow out these remarks would occupy too much space at present, I must, therefore, confine my observations to those rare cases of idiopathic sinking or debility.

The idiopathic forms seem to depend either on a spontaneous deficiency (without apparent cause) of the tone and vital energy of the nervous system, or on a state of spontaneous anæmia, from some defect in the process of sanguification. These two conditions, although presenting some symptoms in common, are nevertheless sufficiently dissimilar, so as to be readily diagnosed. The case I have just narrated is a good example of the first form, and in it we see the peculiarities which distinguish such cases :—it occurred in a delicate female of naturally feeble powers; the depression was sudden and severe; the countenance was expressive of exhaustion and anxiety, not of bloodlessness; the tendency to a condition not far removed from syncope was very great; derangement of the digestive organs was followed by very serious symptoms; stimulants proved highly beneficial; and lastly, the return to health, under the employment of careful diet, slight exercise, tonics and cordial stimulants, was very rapid—indeed as rapid as the previous depression was sudden—and unaccountable. In the idiopathic forms of anæmia the naturally florid parts of the body are pale and bloodless; the pulse is rapid and jerking; and there is a tendency to a hectic state of system. These cases commence and progress gradually; the countenance is pallid and frequently œdematous in the morning, whilst the ancles swell at night; their progress is almost always slow, and tonics, especially iron, are much more beneficial than stimulants, although temporary depression may call for the occasional use of the latter class of remedies.

The case of Mrs. D. illustrates well those examples of blindness and deafness which depend on a general depression of the nervous tone of the body, and not on mere anæmia, or deficiency of blood in the parts; and connecting her case with two others which I have previously published—the one a case of most sudden and severe depression of the vital powers, with blindness, which ultimately turned out to be dependent on the infection of scarlatina—the other a case of amputation terminating fatally, and attended by loss of vision, which commenced and continued with the sudden sinking of the powers of life, preceding death

by several hours—sufficiently authorize me, I conceive, in dividing the subject of amaurosis from debility into three distinct forms—the first dependent on depression of the general nervous system ; the second on a deficient supply of vitalised or arterial blood ; and thirdly, those cases which follow severe illnesses, in which both the nervous and vascular systems are concerned.

15, Southampton-street, Covent Garden.
April 28, 1842.

TREATMENT OF OPHTHALMIA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Seing some excellent observations by Mr. Bulley in your Number for April 9, on the treatment of affections of the conjunctiva, attended with purulent or copious discharge, I beg to say that my late partner, Mr. Alexander, thirty or forty years back, invariably treated the purulent ophthalmia of new-born infants with forcible syringing, first of cold water, afterwards one syringe full of weak zinc solution every second hour, until the cure was effected, which was generally in a short time, according to the diligence used. I have continued the plan for the last twenty-six years. The surgeon must do it himself a few times, and be very strict with the nurses, or they will not attend, and mere applications or washings outside are worse than useless. The eyelids must be fairly puffed up like a distended bladder with the injection, though it occasions great distress at the time, and requires some firmness in doing it properly. I know of more than one child blind from ulceration of the cornea through the neglect of this treatment, and I consider the forcible removal of acrid matter as more conducive to the cure than the character of the injection used.

I remain, Gentlemen,
Very respectfully yours,
M. J. MORGAN, Surgeon.

Corsham, Wilts, April 27, 1842.

PROPAGATION OF PUERPERAL FEVER.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I have read with considerable interest the instructive cases of puerperal peritonitis which were detailed by Mr. Storrs, of Doncaster, in the last number of your Journal. It will be seen from that communication that, during the winter of 1840, Mr. Storrs was unfortunate enough to encounter a series of cases of this lamentable disease, and which seemed in a great measure to be confined to the field of his own practice, or at least it appeared that no other cases of the same kind had occurred to his brother practitioners in the town. From this circumstance, Mr. Storrs was inclined to believe that the disease had its origin in a peculiar contagion conveyed from a patient, having gangrenous ulceration of the leg, whom he had, just previously to the occurrence of the first case, been engaged in attending, and indeed brought forward some conclusive evidence to prove that such must have been the case.

It may be satisfactory to Mr. Storrs to know that this cause of puerperal inflammation is not altogether uncommon, and as he has not alluded to the experience of any former observer, I will point out a somewhat analogous case, which will, I think, bear him out in his conclusions, and which I will, to save the trouble of reference, briefly transcribe. The case in question is related by Dr. Paley, of Halifax. Dr. P. had been engaged in attending, with a general practitioner, a case of gangrenous inflammation of the penis and scrotum, in a professor of music, who resided in a village near that town. He remarks, "During my attendance in this case one morning, whilst the surgeon was dressing the patient, the scrotum and penis being in a gangrenous state, a messenger came to request him to go to a woman in labour, who resided about half a mile from our patient, and he obeyed the summons without loss of time. Four or five days after this, on meeting again, he said, 'You will recollect that I was sent for to a woman in labour on such a day.'—I replied, 'Yes, and what of that?'—'She is dead; everything seemed to go on well until yesterday, when she was seized with violent pain in the uterus, and she died before I had time to do anything to relieve her.' In the course of two or three days, on meeting again, he said, 'It is very odd, Dr. Paley, I have lost another patient in the same unaccountable way as before;' and the next morning, at our meeting, he stated that he had another patient, about two miles off, seized in the same manner, whom he requested me to visit along with him. After seeing his patient, I told him that she was labouring under puerperal fever; and before we left the house he was sent for to visit another woman, whom he attended in labour, in the same village. I accompanied him, and found her also the subject of puerperal fever. I believe that he had in all six cases of this disease." Dr. Paley further remarks, "There is not the slightest doubt on my mind that the surgeon who was in attendance was the means of communicating something (call it what you please) from the patient labouring under the disease of the scrotum to the lying-in women, which in them produced puerperal fever. I pointed out these circumstances to the surgeon, and advised him to go from home for two or three weeks, and to have his clothes washed and fumigated. Notwithstanding this precaution, which I believed he rigidly observed, I received a note from him, a few days ago, stating that he had had some unfortunate cases of puerperal fever."—*Medical Gazette*, December 6, 1839, and *British and Foreign Medical Review*, April, 1840, p. 571.

I must apologise for having thus trespassed upon your valuable space, but feeling, as I do, that the subject on which Mr. Storrs has so candidly and clearly written, is one of vast importance to the credit of the medical profession, and to humanity generally, and as his observations convey one of the most valuable lessons of carefulness that has ever, perhaps, been inculcated, I take the liberty of addressing you at somewhat greater length than I otherwise should have presumed to do.

Your obedient servant,
AMICUS CANDORIS.

April 26, 1842.

REMARKS
ON
PAROCHIAL MEDICAL RELIEF.

By George C. Watson, M.D.E.

Perhaps you will allow me to insert in your Journal a short statement of the results of two years attendance on the out-door poor in the municipal district of the West Derby Union. The only object I have in view is, to show the inadequacy of the contract system to remunerate properly the medical attendant; at least I can speak of my own case, and I wish that yourself and others should be able to judge from the facts of this case; and concluding, analogically, from other contracts similarly held by medical men in the various unions, there can be no question that the payment of medical men under the new Poor-Law Act is totally regardless of the true interests of the poor, prejudicial to medical practitioners, and, as far as it can be generalised, demoralising in its general bearing.

I have held office for two years precisely, and as each visit to one patient is required to be recorded in a book, an estimate can be obtained readily of the actual amount of "work and labour done." I find that I have been consulted at home, or paid medical visits, 652 times at least within these two years. I was compelled by the contract to find medicine for all these pauper cases. For this, I have received 10 guineas per annum; for the two years, 20 guineas; dividing 652 by 20, gives rather more than 7d. a visit, but as the medicine has to be found out of this 7d. a visit, but a small figure is left for attendance. At least one half must be reckoned for physic, and thus dividing the contract sum, per visit, into equal parts for attendance and physic; what a trifle is 3½d. a visit, or a consultation, even granting that the medicine could be furnished, at first cost, at this rate! The nature of many cases calls for a good deal of medicine; if we are justified in putting the rich to much expense for medicines, we should endeavour to do for the poor in essentials what we prescribe for their more affluent neighbours; hence, I am satisfied that the above sum has been quite absorbed by the furnishing the medicine; and I do not see how any medical man could, even by a sponging economy, realise anything for attendance, unless he were an homœopathist, and, in that case, we all know the poor would ascribe to the globules their real value—nothing medically—something to saddle a notion upon!

Now, whence comes shoe-leather, or even a new hat, out of such remunerative appointments? "*Ex nihilo nihil.*" Where stands the member of a liberal profession under the terms of such a contract? Ought he not to tread the winds on his rounds so that his shoes encounter no friction? In no other trading transaction is there the same counter-play of interest and feeling; the game of self-defence even is taken out of the surgeon's hand if he has a * for the wants and sufferings of those placed under his care.

It is with a simple wish to contribute my mite towards the alteration of a system so prejudicial to the parochial medical officer—so derogatory to the character of the profession, so short-sighted in political economy, that I write this letter; even if only one class is oppressed unequivocally, it is bad, and the galled jade must wince! Satisfied I am, that our profession is so placed, as far as the new-Poor law arrangements go, and though all the paupers should be well attended to under such contracts, yet if it press hard upon, and screw down our own class, then it is an unequal and inequitable plan. With the wish to ascertain for myself the real bearing of the system, and to test its operation, I have continued to hold the post alluded to for the two full years past, with the view, all along, to do my duty strictly and to furnish what data I could at the end of the time. Both for the correctness of the statements I make, and the discharge of my whole duty as far as I knew it, and for non-exaggeration of the same, I challenge any investigation; I fulfilled the past labours as a duty, and I do this as a part of the same duty. I am now abundantly satisfied of the mistaken operation of the contract system. So badly are we paid, that for less than three times that rate of payment I would not undertake the post again. The juniors are those most likely to engage in these parochical duties—it is to warn them from accepting such posts on the present terms that I address these lines to you. I think, instead of the nominal payment of the guardians—no pay at all is preferable for many reasons—the same professional exercise among the poor can be followed out by a judicious gratuitous help; this can be regulated in proportion to the merits and need of the party, the calls of better-paying practice, &c.; and, by so doing, for your charity, at least you have the satisfaction of relieving the wants of the poor, and you enjoy the "*mens conscia recti.*" The mere nominal payment is, of all things, the most galling, and the sooner an effectual stop is put to all such, the better. Let not the junior practitioner forego the chief reward of his earlier practice, his gratuitous visits and advice to the poor, and deserving (himself the judge of that desert and poverty)—let him not lose the substantial reward attending a good and sacred act for the shadow of a reward in a payment only nominal.

The only right plan is, for the guardians of the poor to remunerate their medical officer at a certain fair and fixed rate, per visit, and to find the drugs themselves, either at their workhouse, or, if more convenient, by contracting with a druggist to furnish mixtures, pills, and powders, at so much per member. This would leave the practitioner unshackled in his direction of the medicines by any paltry considerations of profit and loss; a slight degree of returning self-respect would cheer him in his attendance upon the poor; he would begin to realise a conviction that his brains, stored with medical knowledge, were valued at a different rate from the drugs and ointments, and that his willing services were priced higher than those of a medicine porter. Dr. Kay, the commissioner, if I remember right, did specify the rate of 6d. a visit to be what even he thought a fair remuneration. This sum, if given for each recorded visit, would be a comparatively respectable remuneration, instead of the wretched and screwing contract plan at present pursued. In my opinion, no arrangement will be respectable, and of that gentlemanly character men of education have a claim to, until *brains and drugs* dis-

* Manuscript illegible.

solve partnership, so that no party under any circumstances supply both these materials. I grant it is our own fault for accepting these trading contracts; some surgeons in pecuniary straits will be found tempted to do so; but the profession, as a body, ought to resist them, and let the guardians over the country know that medical men will not contract like butchers and bakers for the supply of articles. Let them assert the standing of gentlemen, and they will be respected, their services valued, and adequately remunerated.

From my own experience in this appointment, I have been a loser by the office, and the duty has been most onerous and irksome; I have had to run at the beck of any pauper, who chose to demand my services, as I would not even run after their wealthy neighbours. If you neglect rendering a prompt attendance on the latter, the remedy is in their own hands—they send for another practitioner. If you do not run off to the poor (though they often cry out "wolf" ignorantly or inconsiderately), they have no self-defensive remedy at hand, if we except complaint to the board, &c.; therefore, humanity prompts your early attendance, and generosity whispers scorn in taking any advantage of the defenceless part of your patients. Thus the post is, in its scope, a very arduous one; the nature of the duty most imperative. For my part, I declare that I never had such hard work during the eight or nine years I have been a practitioner.

I will conclude by a few statistical remarks, limited and imperfect as they may be.

Out of the 652 visits paid amongst a population of 4,000 or 5,000, half of which, and more, are a mile at least from my house, many cases occurred where food was more wanted than physic.

Of contagious epidemic and endemic diseases, 37. *Sporadic:* Brain and nerves, 9; organs, respiratory, 22; circulatory, 4; digestive, 20; urinary, 6; generative, 8; locomotive, 7; integumentary, 6; of uncertain seat, 16; accidents, 9. Total, 144. Fatal cases, 13.

This is under the mark considerably, after all; yet it is, as far as it goes, correct, though several cases, in the hurry of business and the pressure of domestic and other cases, have escaped notice after all.

I must add, that I was separately paid about £4 for the midwifery and lunatic cases, and this is the only remunerative part of my contract—the only bit of fair professional payment.

In the affections of the "*brain and nerves*," one case of insanity, supervening on epileptic fits, recovered under treatment; one case of *erotomaniacal* excitement recovered, though with threatening relapses.

In those of *respiratory* organs, one case of phthisis of apparently the most confirmed character, with well-marked hectic, extreme emaciation, and purulent expectoration, underwent the greatest possible improvement for about a year, though the lungs were extensively occupied with tubercle; the hectic left the patient, and the cough entirely, and she got fat, and went out of doors like others, to the surprise of all around, who had despaired of any improvement. She has since, however, had a fresh return of hectic and cough, &c., and she has sunk under her disease this spring.

In the "*circulatory*," one case of anasarca, in a man of sixty-two, arising from valvular disease of the heart, was singularly cured of the dropsy, under which he was labouring, half drowned, as it were, by a supervening attack of what I believe to have been serous apoplexy (not allowed post-mortem), so that those limbs which were oppressed by œdema were relieved from this direct mechanical numbing of the powers of sensation, and were visited in exchange by an indirect affection — paralysis of the motor powers. I was led to prognosticate, from the organic affection of the heart being the cause of the dropsy, that such must return as the effects of the apoplectic attack went off. For a fortnight my prognosis remained unfulfilled, but in a few days the anasarca returned, the thorax became implicated, and death ensued.

In the "*generative*," one case of corroding ulcer of the os uteri came under my care, in which the poor woman had been prescribed for by a physician treating generally only her symptoms. I mention the case for this reason; she had acquired the habit of taking large doses of opium in its crude state by the mouth, a consequence too often of the prescribing for symptoms. I found that I could give far more relief to the woman by opiate suppositories, than by her continuing to take crude opium; less of the drug was required, and her stomach could bear the presence of food to recruit the waste of the body, the demand for food often being increased by agonising pain—a demand which actually is denied gratification by the other mode of exhibiting opiates though still importunately urged by the poor exhausted body, thus adding languor and the faintness of unsatisfied hungering of the system to the other ills; and even though we cannot cure, yet have we no warrant to anticipate the approach of the King of Terrors. I cannot help adding, that even more directly than by the rectum—I mean by the uterus itself—is the pain of course the most alleviable, and by less quantity of the anodyne still, whether opium, morphia, henbane, or conium be the one employed, and the additional advantage of the conjoined use of styptics in case of hæmorrhage is obvious, and has been elsewhere mentioned already. I had a case of *retained placenta* during twenty hours; the patient was completely blanched by the consequent hæmorrhage and all but pulseless; I had to tear it forcibly, yet as carefully as possible from the fundus uteri; she recovered finally, but not yet her colour or good health.

P.S.—What I have brought forward is in no disrespect to the board of guardians of this union; on the contrary, my personal respect towards that body as a whole, and towards some particular members of it, would only add to my reluctance in publishing this letter; but I conceive it a duty to shew the miserable system in present operation, and by so doing, to discharge that debt I owe to the body of the profession, and which every member of it owes, whether he knows it or acts upon it, or the contrary—that relative duty being understood by the term "*esprit de corps.*" Measures, not men, I look at.

West Derby-street, Liverpool,
April 20, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, MAY 14, 1842.

Dr. John Webster has addressed a sensible letter to the Governors of Bethlem Hospital on the propriety of granting greater facilities than at present exist for the study of mental disease in that institution.

Unless the public are prepared to adopt the conclusions of Lord Granville Somerset, and believe that lawyers or men of common sense are capable of dealing with insanity in its various bearings, it is obviously necessary that the treatment of mental diseases should devolve on the medical profession, and that every opportunity should be afforded to its members of studying complaints which they may be called on to treat in the exercise of their art.

The interests of society are deeply engaged in this question. Insanity prevails throughout the United Kingdom to an extent of which the public have little idea. The proportion of persons who labour under some form of mental disease in England and Scotland has been calculated at 1 in every 700; in Wales, at 1 in 800. The total number of idiots or insane in the United Kingdom does not, probably, fall short of 33,000 individuals. The amount of property belonging to the insane in England alone is immense; it may be calculated at about *fourteen millions sterling*, and the clear annual revenue of their estates and properties at £600,000 a year. Where health and wealth are involved to such an extent, it surely behoves the public, or the guardians of the public weal, to watch with a vigilant eye every point connected with the management of the insane—to provide for the due education of those to whom the physical treatment of lunatics is entrusted, and in whose hands, under Providence, is placed the balance of reason, if not of life.

Yet, strange to say, these important considerations are totally neglected in the existing order of affairs. The medical man is supposed to have some intuitive knowledge of madness, just as a chemist supposes himself acquainted with medicine—by divine right. He enters on the practice of his profession profoundly ignorant of the general history, symptoms, and treatment of insanity. The cause is obvious: it does not lie with him. A knowledge of mental—as of bodily disease—can only be attained by clinical observation at the bed-side of the patient. Reading avails little. The book of man cannot replace the book of nature.

Upon this point Dr. Webster cites the following judicious remarks from the pen of the late Sir William Ellis:—

"It is perfectly inconsistent with common sense to suppose, that a man shall intuitively know how to treat insanity. We have seen, that although in the greater number of cases it is attended with the same general result, yet it assumes most varied forms, and great care and discrimination are required in the treatment; indeed it is universally acknowledged to be a most difficult and mysterious disease, and yet it is almost the only one on which the medical student receives no particular instruction. In his attendance on the hospitals, he will, in all probability, have met with almost every other variety of disease which afflicts human nature; at all events, his lectures will have supplied him with some information as to treatment; but I believe that my friend and colleague, Dr. (now Sir Alexander) Morison, of Cavendish-square, is the only lecturer in London expressly on insanity. Indeed, excepting as being incidently touched upon in the lectures on forensic medicine, it appears almost entirely neglected in the course of a medical education; and, as the subject does not form a branch of examination, the pupils naturally employ their time in those studies which will be directly available, and assist them in the obtaining their medical certificates; the result is, that professional men, in other respects well educated, commence practice almost in a state of total ignorance on the subject. This is an evil from which every individual, whatever be his rank and fortune, is liable to suffer in his own person and in that of his friends; and a man of ingenious mind can hardly be placed under more painful circumstances, than to find the father or mother of a family in a state of insanity, entrusted to his care, and feel conscious that upon him depends the restoration of the patient to reason and happiness, whilst his want of acquaintance with the disease renders him unfit for the task, and he knows not where to apply for advice. This is by no means an imaginary evil; it is one of frequent occurrence, and numerous are the instances where amiable and valuable members of society are consigned for life to a perpetual banishment from their friends in the gloom of a madhouse, solely from ignorance on the part of the medical adviser. This ought to be remedied."

The state of medical education, as it relates to insanity, is thus shown to be most imperfect and defective. The remedies are easily pointed out. We have merely to follow the same method which is pursued in the study of other branches of medical science. The student should acquire an acquaintance with the general history of mania through the medium of lectures, and learn to apply the doctrines he has been taught, by attendance at the bed-side of patients affected with mental disease. To attempt effecting the object, as Dr. Webster justly remarks, by any other mode, would only lead to disappointment, tend to perpetuate ignorance, and prevent real improvement.

"Reading will, no doubt, considerably assist the student in investigating affections of the mind; but that method of study will not be sufficient, for without actual observation of this disease, when variously affecting the human constitution, any knowledge otherwise obtained is neither so available in practice, nor will prove so useful to the patient, as experience

acquired from personal attendance upon insane patients, especially when that mode of study is pursued under the guidance of experienced teachers, and those accustomed to instruct their junior brethren, in the wards of an hospital. From these remarks, it follows that the most useful method to adopt for improving the knowledge of medical men in mental diseases would be, in the first place, to open the doors of our great public hospitals for the reception of the insane, as, for instance, St. Luke's, Hanwell, and Bethlem, to medical students under proper regulations, should they feel desirous of investigating insanity, in the extensive fields for study which these institutions contain. It would likewise prove of much use if the medical corporations, prior to granting their diploma, were to exact attendance at such hospitals for a limited period, and also attendance at lectures on the nature, pathology, and curative treatment proper for that class of maladies."

The talented physician of the Hanwell Asylum proposes to deliver a course of lectures on insanity to the London students; if these lectures be given in the metropolis full opportunity of oral instruction will be be afforded; but lectures are of little use unless united to clinical observation. The Hanwell Asylum is, we fear, too far distant from town to be made available as a clinical hospital of mental affections. We have, however, institutions in the metropolis which are perfectly suited for the purpose. Bethlem Hospital contains from 310 to 340 patients, most of whom labour under forms of insanity which are regarded as curable; the wards are extensive; and the medical officers of the establishment are men of extensive experience and acquirements in this particular department. Nothing, in short, as Dr. Webster observes " is really wanting at Bethlem Hospital to make the establishment in every way useful to the public, but a more free admission of medical students to the wards of the hospital, whereby the ultimate benefit accruing to society may be extensively disseminated."

We sincerely trust that the governors of Bethlem and St. Luke's, to whom the observations of Dr. Webster are chiefly addressed, will take the subject into their serious consideration. The objections against the admission of pupils into the wards of lunatic asylums are few, while the advantages to be derived are immense. Individual inconveniences should give way before considerations of public utility, and fully convinced are we that in no department of medical policy is there more room for improvement of a practical nature, and of extensive application, than in the education of medical men with a view to the proper treatment of mental disease.

In another part of the Journal will be found a Report from the Poor-law Committee of the Provincial Association, on the general order of the poor-law commissioners relative to parochial medical relief. The central council of the association have adopted the suggestions of the poor-law committee, by communicating with the Home Secretary on the points mentioned in the report. It is much to be feared, however, that the question of medical relief has not been noticed by Sir James Graham in the bill which he introduced on Wednesday last for the continuation of the poor-law commission. The bill has not yet been printed; but in the analysis given by some of the political journals, we have in vain sought for proof that the just and temperate demands of the medical profession have received a thought from her Majesty's Secretary of State for the Home Department.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

April 26, 1842.

Dr. MERRIMAN in the Chair.

A Case of Dislocation of the Knee, with Observations. By HOLMES COOTE, M.R.C.S.

The object of the author in the relation of the case here presented, and in the observations which follow it, is to insist upon the practical inference, that in dislocation of the tibia forwards (or of the femur backwards) the injury to the ligaments, and other soft parts about the knee joint, is not necessarily such as to render the recovery of the limb in a perfectly useful state a forlorn hope, as it has been represented by writers of high authority, some of whom have almost regarded amputation as *primâ facie* necessary to save the life of the patient.

Boyer, among others, observes that " complete dislocations are rare, because the surface of the condyles of the femur is of so great extent, that, necessarily, ligaments, tendons, and all other soft parts, would be enormously torn; a circumstance that could not happen, unless the power producing the accident acted with extreme force," &c. Delpech speaks of these accidents in the same tone, as very serious, in the degree of laceration which must attend them, but is disposed to recommend caution in adopting the conclusion of some other writers, that amputation of the limb is necessary.

In the case related by the author, the reduction was easily effected, and the injury of the soft parts must have been slight, as the patient was on his legs, and able to run, in sixteen days. He enters at some length into the anatomical examination of the ligaments of the joint, for the purpose of showing that dislocation may take place without any material laceration of them. Some interesting remarks follow on the time required for the reunion of lacerated tendons and ligaments, partly founded on observations of the progress of cases in which the former have been divided on account of distortions; and the paper concludes with some considerations on the treatment applicable to distortions of the knee.

A Case of Fungus Hæmatodes. By S. W. J. MERRIMAN, M.D., Physician to the Westminister General Dispensary, Gerrard-street, Soho.

A delicate boy, seven years old, suffered for some months from debility, and anomalous rheumatic pains.

Two very painful tumours were then observed, one arising from the occiput, the other from the forehead: constant pressure on these tumours tended to diminish the pains: the tumours grew rapidly in size, spreading in various directions, by which the left eye was nearly thrust out of the socket; œdema supervened in the lower extremities, and death ensued in about ten weeks from the appearance of the tumours. The post-mortem examination showed these to be of a medullary nature: arising from the diploë, the internal table of the skull was scarcely at all affected, but the external was thickened, and covered, wherever the tumours had spread, with bony spiculæ shooting up into the morbid growth. Some of the ribs were also affected with the same disease, and many axillary, lumbar, and inguinal glands were converted into a similar bloody brain-like substance, but, generally speaking, the viscera were healthy. In conclusion, the author notices the boy's mother, who has nearly lost the use of her wrist and knee-joints by a species of chronic rheumatism, acting in a peculiar manner, and producing no distortion.

A Case of Congenital Cataract, where sight was acquired by couching at the age of twenty-three years. By R. A. Stafford, Surgeon to the St. Marylebone Infirmary.

The disease in the case here related was of the capsulo-lenticular variety, and the operation was performed by depression, the lens and capsule being carried downwards and backwards into the vitreous humour out of the field of vision. The patient's recovery proceeded very satisfactorily, and in the course of it, phenomena were exhibited differing in some material respects from those described as having occurred in the cases narrated by Mr. Cheselden and Mr. Ware, in the Transactions of the Royal Society.

Among these phenomena, all of which are minutely detailed by the author, the most remarkable was the power gained by the patient, a very short time after the operation, of accurately estimating distance. The author believes that his patient was more advanced in age at the time of the operation than any other upon whom the operation for congenital cataract had previously been performed with success. Mr. Cheselden's patient was 13, and Mr. Ware's only 7.

ACADEMY OF MEDICINE, PARIS.

April 26.

ABSORPTION OF POISONOUS SUBSTANCES.

M. Orfila announced to the academy the results of numerous experiments, which prove—

1. That sulphuric, nitric, hydrochloric, and oxalic acids, diluted with water, are absorbed and may be detected in the urine.

2. That the same acids, in the highest degree of concentration, are also absorbed as they become diluted by the fluids of the intestinal canal, the exhalation of which they occasion.

3. That the absorption of the salts of lead, bismuth, tin, zinc, and gold cannot be denied, since the metallic basis is found in the liver and urine of dogs poisoned with these salts. They may all be easily extracted by the same process—viz., carbonising the viscus with nitric acid, and treating the product with nitro-muriatic or nitric acid.

4. That the salts of mercury are likewise absorbed, and carried with the blood into all the organs; this may be proved by treating the viscera of an animal poisoned by mercury, with nitro-muriatic acid, and then passing through the solution a current of chlorine gaz; or, still better, by carbonising the viscera with a strong acid in a closed vessel, and treating the product with boiling nitro-muriatic acid.

5. Portions of ioduret of sulphur, nitrate of potass, alum, ammonia, and chlorine, have also been found in the urine, viscera, and especially in the liver of animals poisoned with these substances.

VACCINATION.

M. Gauthier de Claubry read the conclusions of the Annual Report for 1840. The number of vaccinations amounted to 525,509 in 836,789 births, or to five-eighths of the whole number born. Of 45,060 vaccinations, the results of which were mentioned, 881 failed. In two cases there was a general eruption of pustules over the body, the fluid from which produced regular vaccinia.

Epidemic variola attacked 14,470 persons, of whom 1,668 died; in 24 cases small-pox occurred a second time, and three of those thus attacked died. The great majority of persons, whether recently or for a long time vaccinated, escaped epidemic small-pox; some had modified small-pox, which was generally mild and of short duration. Of 406 persons attacked after vaccination, only 6 died. Revaccination was performed in 2,214 cases; 1,704 failures; 227 false vaccinia; 270 secondary cow-pox, apparently regular; 3 persons who had been successfully revaccinated were attacked with varioloid. The average cost of vaccinating each infant during the year 1840 was *threepence halfpenny*.

The following are the conclusions of the report:—

1. The regular vaccine is a preservative against small-pox; the protection, however, is not absolute; for a small number of those vaccinated are subject to an eruption commonly known under the name of varioloid.

2. The latter disease is generally mild, and free from danger; it destroys 1 patient in 100, while the mortality of small-pox was 1 in 8½.

3. A first vaccination destroys the tendency to a second attack of vaccinia as well as of small-pox; still, in some persons the aptitude to receive the disease returns after a longer or shorter period. Again, certain persons who have had small-pox may contract a regular vaccine, but this does not prove that they are apt to have small-pox again.

4. The most perfect revaccination does not guarantee the individual against having a varioloid at some future time.

5. In general, small-pox attacks persons only once; but some may have it a second time, and the second attack is just as severe as the first one.

May 3.

INFLUENCE OF BURIAL-GROUNDS ON PUBLIC HEALTH.

The Minister of the Interior required the academy to furnish answers to the following questions:—

1. Is the presence of burial-grounds in cities capable of acting injuriously on the health of the public?

2. Should burying-grounds be removed to a distance from towns and all inhabited places? and is there any danger in permitting the deposit of dead bodies in churches?

Supposing the second question to be answered in the affirmative, to what distance from town should the cemetery be removed?

The questions were submitted to a commission composed of MM. Orfila, Keraudren, Lecanu, Villermé, and Royer-Collard.

ACADEMY OF SCIENCES, PARIS.

April 25.

STRUCTURE OF THE SPLEEN.

M. Bourgery presented to the academy his work on the microscopic anatomy of the spleen. According to the author's researches, the spleen is composed of two parts; one vascular, the other lymphatic. The vascular system is arranged in small cells; the lymphatic composed of very small glands, in such great numbers that, if collected together, they would form two-thirds of the organ, at least. The glandules are united together by numerous lymphatic vessels.

ROYAL MEDICAL SOCIETY, VIENNA.

January 3, 1842.

Dr. Moos related a case of *crusta serpiginosa* which he had treated successfully with the syrup of the iodide of iron. The syrup contained one part of the iodide to three of syrup.

Professor Wagner drew attention to the researches of Dr. Pravaz relative to the use of galvanism as a remedy in cases of poisoned wounds, and to the communication forwarded by Sir Robert Ker Porter on the value of the guaco in similar cases.

January 15.

A member spoke at some length on the prevailing character of the diseases during the last half year, and introduced the topic of the treatment of typhus fever.

Dr. Moos declared himself in favour of a simple expectant method in the treatment of this disease. We possess no remedies which have any effect on the essential element of typhus fever, and the most rational medication consists in combatting the symptoms or complications which may arise in the different forms of the disease.

Professor Von Bischoff would distinguish four stages of typhus fever. In the first (intestinal stage), characterised by irritation of the mucous coat of the intestines, antiphlogistic remedies are indicated. Ipecacuanha, sal ammoniac in small doses, oleaginous emulsions (if diarrhœa exist), carbonate of potass with lime-juice, small doses of tartar emetic, the liquor ammoniæ acetatis, support the patient's strength and determine to the skin. If much headache be present, cold lotions, leeches, and sinapisms are necessary. In certain cases, great benefit is derived from emetics in the first stage of the disease. In the second stage we must direct our chief attention to the intestines, and particularly to the ilium. The indications are to prevent ulceration and improve the condition of the blood. Cupping-glasses should be applied over the ileo-cœcal region, and counter-irritation afterwards kept up by the tartar emetic ointment. Blisters to the same part are also useful, and when the skin is dry and very hot, tepid baths may be employed with advantage. Of internal remedies, the most efficacious are solution of chlorine, ipecacuanha, dilute muriatic acid, Haller's elixir, arnica, and sulphate of quinine. The choice of remedy must be determined by individual circumstances; we cannot lay down any general method. It is often necessary to combine the above mentioned substances with emollients. When the pulse is very quick and weak, the vital powers greatly depressed, and the skin dry and becoming cool, then valerian, arnica, camphor, and stimulants are requisite. In the third and fourth stages we must support the patients' strength by proper diet and the judicious employment of tonics. Small doses of calomel may be given with advantage to correct the abdominal secretions.

January 31.

Dr. Mojsisovics related the case of a young man who had been bitten by a dog. The wound was carefully treated during ten weeks by a medical man, and belladonna administered internally, but symptoms of hydrophobia set in, and he died. On examination of the body after death, softening of the brain and perforation of the œsophagus were discovered. Professor Berres mentioned some particulars connected with this case and derived from microscopic investigations. The blood had a dissolved appearance; its constituent parts were intimately mixed together; the serum was of a rose-red colour; the globules white, larger than is usual, gelatinous, and without any neuclei. The nerves were altogether softer than normal, and their texture, as it were, dissolved.

THE MEDICAL ASSOCIATION OF THE NORTH OF ENGLAND.

The annual meeting of this influential institution was held on Tuesday, April 19, in the lecture-room of the Literary and Philosophical Society, Newcastle-upon-Tyne. There was a large attendance of the members, and several non-professional gentlemen were also present. The proceedings of the anniversary are reported at considerable length in the "Gateshead Observer," from which we have condensed the following brief summary, regretting that our space does not admit of a more complete account of the meeting.

Dr. Headlam, the president, having taken the chair, first touched upon several matters of local interest, and then introduced the subject of Sir James Graham's medical bill. Upon this point Dr. Headlam observed, "that the bill which they were led to expect from Sir James Graham was not a measure that ought to satisfy the profession. He feared that the Home Secretary had too close an intimacy with existing corporate bodies, who had so long held the power entrusted to them, without sufficiently extending the reputation and usefulness, or protecting the interests, of the medical profession. But let the subject be once brought fairly and authoritatively before

Parliament, and a full discussion take place, and a measure founded on truth and justice must prevail." The president then called to mind the principles for the promotion of which the association had been formed, and concluded by insisting, at some length, on the necessity of an uniform qualification of medical practitioners throughout the United Kingdom.

Mr. C. T. Carter, honorary secretary, then read the report of the council, a very able document, drawn up by the indefatigable secretary himself. The report embraced a complete history of the proceedings of the association since their last meeting in October. In reference to Sir James Graham's bill, the reporter observes, "It is not to be supposed that a plan of medical reform can be acceptable to the profession which would concentrate the whole governing power of that profession (for England at least) in the Colleges of Physicians and Surgeons of London, even with such alterations in the constitution of those bodies as have been hinted at in connection with the reported arrangements. The well-earned unpopularity of these colleges, their indifference to the general welfare of the profession, must be known to the right honourable Secretary for the Home Department, who was a member of Mr. Warburton's committee on medical education, &c., in 1834; and surely it cannot be intended that they *alone* should furnish the elements out of which is to be constructed a central board or council of health; whilst the mass of English medical men—the general practitioners of the kingdom—are to have no voice in the election of a body to which is to be entrusted the entire management and control of medical affairs. Neither is it to be imagined that this numerous class will be contented that the licensing power—the power which gives them a legal recognition as practitioners of medicine—should be held by a corporation which is not deemed worthy to form a constituent part of the general board of management. If report be deserving of credit, the triple examination which, consistently therewith, the general practitioner is to undergo, by *physicians*, *surgeons*, and *apothecaries*, and the threefold nature of his professional duties, instead of entitling him to consideration, would be made the ground of his exclusion from all participation in the election of the general council—this privilege being confined to those who *profess* to limit their practice exclusively to medicine or to surgery. The plan (as reported) does not aim at preserving that natural unity of the profession which has been so universally acknowledged in modern times. The most eminent members of the profession have agreed, that, up to a certain point (and that the commencement of their practical career), the education of the physician and the surgeon should be the same. No one will, in these days, be found to deny that the physician, although rarely or never required to perform the *manual* operations of the healing art, should nevertheless understand both the theory and practice of surgery; and a knowlege of medicine is even still more indispensable to the surgeon, for it is notorious that the greater part of the practice of those persons who are designated pure or consulting surgeons, is in medical cases, and no man unskilled in medicine can hope to treat with success those diseases which are usually consigned to the surgeon; and yet, according to the reported ministerial plan of medical reform, no provision seems to exist for testing the medical knowledge of the surgical practitioner."

The reporter next points out the absence of any measure in Sir James Graham's bill for the protection of legally qualified practitioners, and concludes with the following summary of the principles of the association:—

"1. A full and fair representation of the professional body in the government of the medical corporation, and in the appointment of the medical members of any general board or council which may hereafter be formed. 2. A uniform qualification as the requisite for a licence to practise medicine, to which branch of it soever the licentiate may more *especially* direct his attention, and irrespective of any degree or title which he may desire to possess. 3. Reciprocal privileges for licensed practitioners throughout England, Scotland, and Ireland. 4. A protective power, both for the public and the profession, against spurious and unauthorised practitioners of medicine or surgery.

"These principles, as your council have repeatedly endeavoured to explain, could be carried into effect without the abrogation of the existing orders of physician, surgeon, and general practitioner, and without any improper or unwarrantable interference with the rights and privileges of the universities and colleges of the United Kingdom. Their power to educate students, and to grant degrees and diplomas, they would still retain, subject, perhaps, to the control of a general board or council; and it would be most desirable that, through the instrumentality of such a council, the conditions attached to the granting of degrees, diplomas, &c., should be assimilated throughout the three countries, so that the same title might indicate a *given* qualification, by whichsoever of the universities or colleges it should have been conferred. The propriety of such an arrangement has been recognised in a report published some time since by the Royal College of Physicans in London."

Mr. Carter next laid before the meeting the financia account of the past year, from which it appeared that the treasury of the association was in a very satisfactory condition.

On the motion of Dr. Glover, seconded by the President, an especial vote of thanks was accorded to Mr. Carter, for his able report and his valuable services to the association.

Dr. Glover then read the report of "the committee on medical appointments to hospitals and other public charities."

"The committee conceive that the great evils of the system are, the mode of canvassing which prevails at the elections—the appointment of medical officers without due consideration being given to the respective professional claims of the candidates—and the holding of offices in many institutions by one individual.

"There can be but one opinion with regard to canvassing. This practice is infinitely more likely to promote the success of a candidate of inferior qualifications than of one of superior attainments; because the former is more likely to have recourse to those little acts of popularity which the possessor of real merit will most probably disregard. Canvassing is too often a degrading and unprofessional appeal to the habits and caprices of the nonprofessional public.

"To such an arrangement as would place every member of the profession, residing in a place where an hospital might exist, successively in an office, the committee are decidedly opposed; because, unfortunately, members of the profession are to be found who may with advantage be subjected even to the scrutiny that at present exists, before being allowed to undertake so responsible an office as that of surgeon or physician to a public institution. Besides, your committee think that where pure surgeons or pure physicians are to be found, they should have the advantage of the means of cultivating science which public institutions can place at their disposal, and of which they are likely to be more capable of taking advantage than general practitioners.

"Besides the abolition of canvassing, the only improvements on the present system which the members of the committee can agree in proposing, are two:—

"1. That the appointment should not be made for life, but for a term of seven years (as in Edinburgh), or other limited period. The appointment should then be renewable, but the office open to competition. Along with this, all the medical officers of infirmaries and dispensaries should be compelled to give clinical instructions where pupils are to be found.

"2. That no one be allowed to hold more than one infirmary and one dispensary appointment together."

After the discussion and regulation of various other matters, including the regulation of the profession, protection of members, medical etiquette, and the Anatomy Act, the members of the association, and many of the chief men in Newcastle, partook of an excellent dinner. The only incident connected with the feast that we can spare room to mention (and we do so with pleasure) is the presentation of an elegant silver tea-service to Mr. Carter, "as a tribute of respect and gratitude from the North of England Association."

SPECIAL REPORT

OF THE

POOR-LAW COMMITTEE

OF THE

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

April 30, 1842.

Your committee, at the request of the central council, have perused and carefully considered the *general medical regulations*, and the *explanatory circular* to the boards of guardians, recently issued by the poor-law commissioners, and recommended to the medical profession by the President of the Royal College of Surgeons.

In submitting to the council the result of their examination of these documents, your committee would express their satisfaction at perceiving that the strenuous efforts of the medical associations to obtain an improved administration of medical relief for the poor—efforts persevered in under very discouraging circumstances—have at length proved not altogether fruitless.

These exertions may have been censured by some as factious, and by others considered unnecessary or useless; but the beneficial results, at present only partially manifest, will silence numerous objectors, and should encourage the association to a judicious continuance of well-directed endeavours to secure a complete and decisive reformation of the system.

The several improvements directed by the poor-law commissioners are arranged in the following order:—

First. "Tenders for medical attendance" (Articles 1 and 2).

Your committee congratulate the association, and the profession at large, on the abolition of that most obnoxious form of "tenders," in which the medical candidate names the sum for which he is ready to undertake the office. It is, however, a matter for unqualified regret that the commissioners still leave the guardians at liberty to fix the price of medical duties, without reference to any fixed scale or acknowledged principle of computation.

Secondly. The qualification of medical officers (Articles 3, 4, and 5).

Your committee observe, that qualifications in both medicine and surgery will for the future be required of candidates for union appointments. The profession have long contended for the adoption of a similar measure; but the value of the present regulation is much impaired by its exclusiveness, and its obvious tendency to confer an undue advantage on the *London* College of Surgeons.

Your committee, however, feel the less anxiety on this point, as it appears more than probable that the measure of medical reform, promised by government, will satisfactorily adjust the qualification of all medical men in public employment, and thus, in effect, set aside the commissioners' propositions.

Thirdly. The regulations relative to the maximum area and population of medical districts (Articles 6, 7, 8, and 9), are, in their present state, open to objection; yet their introduction confirms the correctness of the assertion so repeatedly made by your committee, and more than once denied by the commissioners,* that *it is both possible and expedient to establish, by direct enactment*, maximum limits to the population, if not to the area, of medical districts.

The limiting of population to 15,000 in large towns is a decided improvement upon existing arrangements; but, throughout the country, and in the great majority of unions, this limit will be attended with but little advantage.

Again, the limiting of area to 15,000 acres will by no means adequately reduce the extent of districts in populous localities, whilst it will be found impracticable, not only in Wales (where the commissioners do not propose to enforce the rule), but also in several English unions, where the population is widely scattered.

Your committee have founded all their recommendations on this principle, that in proportion as the population of the locality is more scattered, so the number of inhabitants included in a medical district should be less.

Such a proposition, which avoids the difficulty of fixing a positive limit to the area of thinly populated districts, was embodied in Mr. Sergeant Talfourd's

* See their Report, December 31, 1839, p. 45; and Seventh Annual Report, section 20.

clauses, and has been universally approved of by the profession. Had it been adopted by the commissioners, it would probably have been unnecessary to provide for any exceptions to the rule. From extended inquiries, your committee are assured that a population of 4,000, in any part of England and Wales, might be provided with a duly qualified district surgeon, residing within an accessible distance.

Fourthly. Articles 10, 11, 12, and 13, fixing the remuneration for certain operations, accidents, and midwifery cases, form another concession to the just demands of the profession. Nevertheless, it will be found frequently very difficult to carry into execution the unreasonable provision for a consultation, *at the cost of the medical officer*, except in those instances where there is a partner or qualified assistant, whose gratuitous services he may command.

Fifthly. Articles 14 and 15, providing "*substitutes for medical officers*," appear to your committee unexceptionable, and, if rigidly enforced, will effect a marked improvement on existing practices.

Sixthly. "The mode of obtaining relief by permanent paupers," determined by Articles 16, 17, 18, and 19, is another approximation to the propositions of the medical profession. As the preparation of medical pauper lists is made imperative on every board of guardians, it will obviously lead to a more definite and satisfactory method of calculating the salaries of medical officers.

Seventhly. The regulation relating to the "continuance in office of medical officers" (Article 20), is intended to establish an important principle, and is calculated to check some of the abuses of the present system; but your committee doubt whether medical officers will receive either due protection or just consideration, so long as they are amenable solely to non-professional authorities, or while their continuance in office depends on the pleasure of parties who are necessarily incompetent to judge respecting the correct performance of medical duties.

It appears, both from the 20th and previous articles, that the commissioners still intend to permit the practice of CONTRACTING for medical services.

Your committee feel strongly the necessity of abolishing this practice.

The appointment of union surgeon need not require the execution of any CONTRACT; nor can previous custom be admitted as a sufficient reason for compelling members of the medical profession to submit to an indignity, which is not required of the clergy in their appointment to the office of *workhouse chaplain*.

The preceding remarks are intended to show the existence of some serious imperfections in the new poor-law medical regulations; yet, on the whole, they constitute an amendment of the present system, and contain within themselves the germs of future improvement. It is worthy of observation, that the period of the year at which these regulations are issued virtually precludes their adoption by the great majority of the boards of guardians until March, 1843. They are, however, circulated throughout the medical profession *before* the government bill for amending the new Poor-law has been submitted to Parliament.

The object of the commissioners in selecting this particular occasion for the announcement of their amendments can scarcely fail to be rightly understood and properly appreciated. If, in consequence of the promulgation of this "general order," the poor-law question should be settled by Parliament, without any provisions for the regulation of medical relief, it will remain to be seen whether the amendments now directed will be strictly and impartially enforced, or whether the boards of guardians will be allowed to postpone their adoption at pleasure, or to take improper advantage of the numerous exceptions and relaxations provided by the "order" itself.

The amount of benefit to be derived from the new code will greatly depend on the vigilance of the profession in general, of the colleges and associations in particular, and especially of the several weekly medical journals which have so ably and successfully co-operated in the attainment of an improved administration of medical relief.

The main defect in these regulations is that noticed under the first head—namely, the absence of any specific directions respecting the amount of medical salaries, or the method of computing them.

Whether or not this omission may arise, as has been suggested, from a want of power on the part of the commissioners to establish a principle, or to define certain rates of remuneration, is a question of law, on which it would not become your committee to pronounce an opinion; but they hesitate not to state their conviction, that so long as the estimate of medical services is allowed to depend on the varying and arbitrary decisions of different boards of guardians, the profession must continue to appeal to the legislature for the enactment of certain limits (or at least a minimum limit) to the remuneration of union medical officers, so that due protection may be afforded to the interests both of the rate-payers, of the sick poor, and of the medical profession.

The principle which the commissioners have uniformly sanctioned, and continue to recommend, is to combine a salary calculated on the number of permanent paupers, with a payment per case for others,—both of which modes of payment are perfectly compatible with the recommendation of the parliamentary committee that medical relief should be a parochial and not a union charge.

The commissioners "remark incidentally that unless a system of payment per case is adopted," the recommendation referred to "cannot be carried into effect."

This remark is likely to lead to a very erroneous conclusion. The fact is that there are other systems of remuneration equally compatible with separate parochial charges.

It is obvious that an average payment per head for the several paupers on the list (the fixed salary) may as readily be charged to their respective parishes as a payment per case for other poor persons.

To carry into effect the above recommendation of the parliamentary committee, and to secure a constant attention to the diminution of medical districts—a point imperfectly provided for by the commissioners' present regulations — your committee are still of opinion that the remuneration for distance or area should constitute a distinct item in the medical salary; that, in every district, it should be separated from the other (constant) items—namely, medicines and medical attendance within a mile of the surgeon's residence;

and that it should be charged only on those pauper tickets or cases of illness, or to those parishes or united hamlets, which may be more than one mile distant from the surgeon's residence.

In the clauses D and E, lately published by the association,* and submitted to government, the charge for distance was calculated not on individual cases or paupers, but for each entire parishes. The distance was proposed to be measured to the nearest point of the parish; and a charge added for its *area*.

It was also suggested† that if the latter charge were omitted, the *mean* distance of the inhabitants of a parish or of united hamlets should be estimated, or some central point taken instead of the nearest boundary.

Your committee consider it a matter of comparative indifference whether the charge for distance be made on parishes or on individual paupers. The "pauper ticket" for the permanent class, and the "order" for the casual poor, would afford an opportunity to the relieving officer to name the distance of the patient from the medical officer, and would thus enable the clerk of the union readily to determine the charge for mileage on account of each parish in the district.

The rates of remuneration should not fall below the minimum rates specified in the clauses D and E before referred to.‡

Your committee are firmly convinced that if the medical salaries were equitably regulated,—and a separate charge at the rate of one fourth part of the ordinary remuneration added for each mile of the distance between any paupers or parishes and the district medical officer's residence,—the principal defects in the new regulations would be supplied, and the poor might be properly provided with medical attendance.

To this point, therefore, your committee earnestly request the attention of the council, believing that a suitable appeal made to the Secretary of State before the passing of the Poor-law Bill might be productive of the most beneficial effects.

It should be observed that the President of the College of Surgeons suggests that the Secretary of State should, if possible, be induced to "empower the commissioners" to fix the salaries.

This course was recommended by Mr. Sergeant Talfourd in 1840.§ And in case the government should refuse assent to the enactment of certain limits to medical remuneration in the forthcoming Poor-law Bill, it might be advisable to press for the adoption of Mr. Sergeant Talfourd's and Mr. Guthrie's suggestion, though it appears to your committee even in that case highly important that the *principle* on which the salaries are to be calculated should be determined by Parliament.

* Administration of Medical Relief, p. 133, 134.

† Ibid, p. 108.

‡ The sums 2s. 6d. per head and 6s. 6d. per case (see Administration of Medical Relief, pp. 70, 107, 108) mentioned by the President of the College of Surgeons, if intended as an average and to include "distance," are decidedly too low. The President seems to prefer a salary, calculated on the entire population of the district, varying in ratio merely according to its extent. Were Mr. Guthrie more conversant with the details of the question, he would not have represented the "real objection" to this proposition as "purely theoretical," and as "one with which the doctor has no concern." "The experience of the last seven years" has in truth *proved* that a salary calculated on the population bears no uniform or constant relation to the number of paupers, which differs greatly in different localities. Under Mr. Guthrie's plan, therefore, the amount of medical duty might vary to a considerable extent, without any corresponding variation in medical remuneration—an injustice which may be avoided by adhering to the principle of remuneration sanctioned by the poor-law commissioners. With respect to midwifery, the president "understands the sum of twenty shillings to be justly claimed by the surgeon, where the distance from his own house, in any ordinary case, exceeds two miles." In the absence, however, of any explicit regulation on this head, an attempt should be made to obtain a definite increase of remuneration, proportioned to the distance of each case of midwifery (as of other cases), from the medical officer's residence.

§ See Administration of Medical Relief, p. 131, clause 3.

LICENSED LUNATIC ASYLUMS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The spirited letter of Dr. Adam Hunter, on the subject of licensed lunatic asylums, inserted in your last week's publication, has, doubtless, been read with much interest by the medical profession throughout the country, although many of the points discussed therein have been previously commented upon in the recent numbers of your improving Journal. There is good reason to hope, to speak medicinally, that the *advice* recommended by the medical press, and administered by several members of the House of Commons to Lord Granville Somerset, will operate beneficially. On the 3rd of May his lordship withdrew his bill for the present, and gave notice of "his intention to make extensive alterations, as well in the objects as in the form of the measure," and moved that it be further considered on the 23rd of May. Dr. Hunter wishes for a list of the names and designations of the metropolitan commissioners of lunacy. They are given as follows in the last Medical Almanac:—Lord Ashley, Robert Gordon, Esq., R. Vernon Smith, Esq., J. Abel Smith, Esq., Lieut.-Col. Sykes, Col. J. Clitheroe, Edmund Halswell, Esq., George Acklom, Esq., George Clive, Esq., the Rev. D. George Shepard, James W. Mylne, Esq., B. Walter Roche, Esq., Dr. Thomas Turner, Dr. John Bright, Dr. Henry Herbert, Dr. Southey, Dr. J. R. Hume, Dr. Edward J. Seymour; Secretary, Edward Du Bois, Esq.

Thinking it desirable that the profession should be made acquainted with the state and progress of Lord G. Somerset's bill, I am induced to send you this communication, which you will perhaps insert, if you think it of sufficient interest.

I am, Gentlemen,

Your obedient servant,

G. W. DYKE, M.D.

Corsham, May 9, 1842.

PORTRAIT OF MR. B. COOPER.

The numerous pupils and friends of Mr. Bransby Cooper will hear with pleasure that the engraving from his portrait by Eddis is now completed. We have been favoured with a copy of the engraving, which is well executed. The portrait occupies a place in the present exhibition at the National Gallery, and cannot fail to attract attention by its merit as a painting, and by its striking likeness to Mr. Cooper.

RETROSPECT OF THE MEDICAL SCIENCES.

FISSURE OF THE RECTUM.

A lady, 30 years of age, suffered for two years from a most painful fissure, about an inch long, situated in the posterior paries of the rectum. Defecation was exceedingly painful, and during the last six months of that time she experienced a sensation of burning, and troublesome pulsations in the part, for three hours after each evacuation. Opiate enemata, and belladonna applications had been had recourse to in the country, but with only momentary relief. Under these circumstances, Messrs. Bretonneau and Trousseau prescribed simple lavement, to be followed, immediately after it had been returned, by one composed of 4 scruples of extract of ratanhy, 1 scruple of alcohol, and 120 of water. Each day this was used the patient was enabled to retain the enema a longer time, and there was progressively less pain during and after each evacuation. In sixteen days the patient was completely cured. Six months have elapsed since the date of this case, and no relapse has taken place. The extract of ratanhy lavement was administered once a day.—*Bulletin Général de Thérapeutique.*

HÆMORRHAGIC DIATHESIS.

Mr. Lane is of opinion that males only are subject to this peculiarity of constitution; the father and son of one so subject are always free from the disease, and the patient inherits the diathesis from the maternal grandfather. He supports his assertions by cases. Dr. Otto, of Philadelphia, relates an instance of this disease affecting the males only of a family, as does also Dr. Hay, of Massachussetts; both assert that sulphate of soda, in ounce doses, taken every morning, has, in their hands, always proved a successful remedy for the removal of the disease. Mr. Wilson attributes it to a deficiency of contractile power in the arteries, and instances a boy in whose case it proved fatal, whose arteries were not more than half the usual thickness. Mr. Wardrop attributed it to a deficiency in the coagulating power of the blood. In this he is apparently supported by a case of Mr. Lane's, who describes the blood as less disposed to coagulate than usual, and so thin that it seemed like blood and water.—*Lancet.*

PLAGUE.

Mr. Davies says, "Reasoning upon the cause of the blood leaving the capillaries, he was led to the employment of the warm bath, and to the administration of stimulants, such as æther and brandy, with the view of getting the skin to act. When perspiration occurred, the patient was safe. He never lost a patient after the adoption of this treatment; he always took care to have a warm bath ready for use. With regard to buboes in plague, where they went on to suppuration, the patient recovered, as he did also if the smallest degree of ptyalism could be really produced." —*Ibid.*

RE-UNION OF THE FINGERS.

M. della Fanteria attended a young girl who had two fingers cut off by accident while engaged in domestic affairs. He found the fingers in some bran, in which they had fallen; but, to his great surprise, they were both cut into two pieces. He, nevertheless, determined to re-unite them to the hand, which he effected by strapping and sutures. At the end of a few days union was perfect, and the poor girl thoroughly recovered the free use of her fingers, the articular motions continuing. This case is verified by the celebrated Vacca, and by Professor Centofanti.—*Annali Universali di Medicina.*

THE ATROPA BELLADONNA.

Mr. Hermann Schweitzer, of Brighton, read a paper before the Pharmaceutical Society, in which he pointed out the distinctive characters of the atropa belladonna and the solanum nigrum, the latter plant having been offered to him several times by herbalists for the belladonna. Both belong to the natural order, solanaceæ, pentandria monogynia, Linn. They are herbaceous, with alternate simple or lobed and often feathered leaves, which, as they ascend, become paired, and of different sizes. The flowers are variable, the corolla is single-leaved, five-parted, fastened under the germ; the fruit is either a berry or a capsule, and the seed contains a fleshy albumen, with a spiral or ring formed in embryo. The atropa belladonna rises to four feet six inches high, the solanum nigrum to two feet only. Leaves, flowers, and berries differ also materially. The leaves of the belladonna are often more than six inches long, and egg-shaped, while those of the solanum nigrum are at the utmost three inches long, and more or less obtuse, angled, and dentated. The flowers of belladonna appear in June and July, and are of a dirty green-yellow colour; in front violet-brown, bell-shaped, and about an inch long. Those of the solanum are much smaller, wheel-shaped, white, sometimes violet; they appear from July to September, often before. The berries of both are black and round; the former being of the size of a cherry, the latter the size of a pea. The difference is so great, it is impossible to mistake one for the other.—*Pharmaceutical Transactions.*

VARICOSE CRURAL VEIN.

An interesting case is narrated by Dr. de Castella, in the "Gazette Medicale," of a lady's coachman, who presented the symptoms of strangulated hernia, under which he sank. He had previously positively asserted he never had a rupture, in which statement he was confirmed by the results of a careful examination of the rings. On examining the body, Dr. de Castella was exceedingly startled on perceiving a round, pyriform tumour, larger inferiorly than superiorly, occupying in the left groin the situation of crural hernia. It was about two inches long and one high, elastic, and of a brownish colour. He immediately proceeded to operate as for hernia, and the result was, that he discovered the tumour to be a varix of the crural vein, which was obliterated under Fallopius' ligament. There were several smaller varices in the internal part of the thigh and leg. The Doctor's alarm arose from his belief that he had mistaken a case of hernia. The cause of death was peritonitis, from cancer of the rectum. The varix may be distinguished from crural hernia by its shape, which is pyriform, or pedicular as it were, by its fluctuation and colour, and by the presence of other varices in the

course of the crural vein. The hernia is globular, hard, and more closely applied to the crural arch. Petit mentions a case where a similar varix was mistaken for a hernia.

ARTEMISIA CERULESCENS.

This plant, which grows on the sea-shore, has been analysed by M. Righini, who states it to be composed of resin, a bitter principle not alcaloid, extractive, a little albumen, a dark green colouring matter, gallic acid, and a peculiar volatile oil. On incineration, the ioduret of sodium, sulphate of potass, the chlorurets of calcium, potassium, sodium, and magnesium, the subcarbonate of soda, and some atoms of silica, have been obtained. The internal administration of this plant in the form of syrup, added, according to circumstances, to the aqueous tincture of rhubarb, the infusion of quassia amara, or the syrup of the sulpho-tartrate of quinine, is recommended in the treatment of intermittent fevers, obstructions of the abdomen, atony of the digestive apparatus, &c. The syrup is made by dissolving an ounce, five drachms, and a scruple of the extract, in two ounces, two drachms, and a scruple of distilled water, to which is added eleven ounces and six drachms of simple syrup.—*Journal de Chimie.*

OPIUM IN RHEUMATISM.

The remedy which, in acute rheumatism, stands next in importance to bleeding and purging is opium. If, by the means already mentioned, the pain has not been very much mitigated within forty-eight hours, or, I should rather say, if any pain then remain, opium should be had recourse to in doses sufficient to give relief. On the average, two grains in the course of the twenty-four hours are sufficient; and I have been led to think that the solid answer better than the liquid preparations. How much opium may be taken with impunity, or even with advantage, so long as its usual effects are counteracted by the presence of pain, I am not prepared to say, but I have often given four, and sometimes six, grains in twenty-four hours.—*Dr. Macleod on Rheumatism.*

Dr. Corrigan states that he has known two hundred grains of opium taken by one patient in fourteen days for rheumatism, without the supervention of narcotism.

SECTION OF THE BICEPS TENDON.

A child was admitted into the hospital for children at Paris, having fallen on the elbow about two months previously, the result of which was an increase of the transverse width of the joint, with permanent semi-flexion of the forearm, attempts at passive motion producing great pain. The tendon of the biceps at the bend of the arm was tense and constricted, giving rise to the belief that its contraction was the cause of the flexion. M. Guersant considered that the injury caused by the fall consisted of a fracture of the external condyle of the humerus with separation, and consequently separation also of the superior extremity of the radius. The subcutaneous division of the tendon of the biceps was made, care being taken not to injure the artery, and with success, as far as the operation itself was concerned. Some venous hæmorrhage followed, but was easily repressed. The flexion of the forearm ceased; the angle was much more obtuse, but extension was not perfect, and any further attempt caused great pain.—*Gazette des Hôpitaux.*

URTICARIA TUBEROSA.

This singular and obstinate affection has been successfully treated by M. Cazenave, at the Hospital St. Louis, with arsenic internally administered. The disease consists of round or elongated swellings, located in the dermis, about the size of a pigeon's egg, which are attended with pruritus, and followed by red patches, as if an effusion of blood had taken place. Fresh points of the eruption show themselves daily, the others gradually disappearing. Of the two cases narrated by M. Demarquay, one was attended with symptoms of a quotidian intermittent fever. Both cases were rapidly cured by arsenic, although the first had existed two years, and the latter four, before that remedy had been had recourse to. In the second case, benefit had been derived from the use of quinine, but it was not permanent. M. Demarquay thinks the arsenic acts as an anti-periodic.—*Ibid.*

POISONING BY STRAWBERRIES.

Dr. Sigmund, of Vienna, has described an instance of poisoning by strawberries, which had been kept for a few hours in a vessel, coloured green. The master and mistress of the house, and the servant, who had partaken of them, complained of nausea and vomiting, with considerable weakness, followed by burning heat at the stomach. These symptoms continued two or three days. Chemical analysis showed that the green colour of the vessel was owing to the presence of the arsenite of copper.—*Oesterr. Med. Wochenschrift.*

THE SULPHO-CYANURET OF POTASSIUM.

This salt, a most valuable re-agent for the salts of iron, has been recommended by Sœmmering to replace in medicine the hydrocyanic acid and the cyanuret of potassium, the therapeutic properties of which it possesses without their inconveniences. M. Meillet employs the following plan for its preparation, which is cheaper than that in which alcohol is used. The mixture of dry prussiate of potass and sulphur is introduced into a Hessian crucible, and heated to the state of pasty fusion; it is then stirred with an iron rod, and withdrawn from the fire. When the crucible is cold, wash the mixture with water instead of alcohol, and filter; and a liquid, charged with the sulpho-cyanuret of potassium, and a little sulpho-cyanuret of iron, will be obtained. The iron is precipitated by means of the carbonate of potass, the fluid is poured off, and if it be alkaline, saturated with a little nitric acid. It is then evaporated and crystallised frequently; the acetate of potass remains in the mother-waters. If the mixture be heated, as some authors advise, beyond pasty fusion, to a dull red, a large quantity of the sulpho-cyanuret of potassium is decomposed, and a notable quantity of carbonate of potass produced. It is better to have in the liquid a sulpho-cyanuret of iron, which can be changed into the sulpho-cyanuret of potassium, than potass, which is a real loss. If the fire has been too strong, and that is most frequently the case, in washing the matter with water we obtain a sulpho-cyanuret of potassium with the carbonate of potass. As boiling alkaline solutions decompose the sulpho-cyanuret into sulphuret of potassium, carbon which is deposited, and azote which is disengaged, the alcohol was employed to

isolate the carbonate insoluble in that menstruum. In that case it is advisable to add a few drops of white pyroligneous acid to saturate the free alkali; the liquid is then evaporated, and set to crystallise.—*Journal de Pharmacie.*

STATISTICS OF SUICIDE IN FRANCE.

In 1836, there occurred 2,310 deaths by suicide; in 1837, 2,413; in 1838, 2,556; and in 1839, 2,717.—*Gazette Médicale.*

ASYMMETRICAL DEVELOPMENT.

There was presented to the American Philosophical Society a lower jaw (fossil) belonging to the genus tetracaulodon. This is remarkable for having only a single alveolus for a tusk; this alveolus is on the right side, and there is not the slightest trace of a corresponding alveolus ever having existed on the other.—*Proceedings of the American Philosophical Society.*

BIN-IODURET OF MERCURY.

The deuto-ioduret of mercury is soluble in a solution of the ioduret of potassium, thus forming a bin-ioduret of mercury and potassium. With this compound, M. Bontigny, a pharmacien at Paris, prepares a syrup as follows:—1 scruple of the deuto-ioduret of mercury, 2 ounces of the ioduret of potassium, and 2 ounces of water—dissolve and filter through paper—then mix the solution carefully with 5 pints (100 ounces) of simple syrup. The ioduret of potassium, which is in excess in this preparation, serves alike to ensure the solubility of the deuto-ioduret of mercury, and to assist its therapeutic influence.—*Journal de Chimie Médicale.*

SEMI-AMPUTATION OF THE UTERUS.

Dr. Grembler, of Neider Orschel, was suddenly summoned one morning to an hysterical female, aged 53, who had long been subject to procidentia uteri. On his arrival, he found her icy cold, and exceedingly pale. He ascertained that she had just removed with a knife that portion of the uterus which projected beyond the vulva, and that considerable hæmorrhage had followed. He arrested the bleeding by the use of the plug and styptics, and of appropriate internal treatment. The portion removed comprised nearly half the organ, including the os tincæ. The patient soon got well, but her recovery was succeeded by hysteria and nymphomania.—*Medicinische Zeitung.*

INTRODUCTION OF AIR INTO THE VEINS, FOLLOWED BY DEATH.

Dr. Godemer, physician to the hospital of Ambrières, in Mayenne, has published in the Transactions of the Medical Society of Indre and Loire, three cases of tumour in the neck, during the amputation of which, a peculiar hissing noise was heard, followed by the instantaneous death of the patient. The only abnormal appearance presented on the examination of the body, was the distention of the cavities of the heart by a great quantity of air. In removing large tumours from the neck, or from near the heart, we should avoid every thing by which the entry of air into the veins can happen. Among these causes, M. Godemer classes the movements given to the tumour, in dividing the circumjacent cellular tissue, with the view of removing the diseased growth whole. To avoid this inconvenience, under these circumstances, he removes the tumour piecemeal, and since he adopted that plan, he says he has not lost a single patient by this unfortunate occurrence. Six cases of tumour of the neck were operated on by him in 1839 and 1840, and with success. The patient suffers a little more pain; but in exchange, there is not any danger of the passage of air to the heart, and the consequent immediate death of the patient.

LITHOFELLIC ACID.

M. F. Goebel has discovered in a biliary calculus, in the zoological cabinet of Dorpat, a new body, to which he has given the above name. It is crystallisable in rhomboidal prisms, terminated by an oblique surface. It melts, at 462 deg. Fahrenheit, into a yellowish fluid, which forms a solid colourless crystalline mass on cooling. Heated with a solution of potass or soda, it forms a soap immediately, which, when cooled, resembles white colophane. It is soluble in liquid ammonia, whence it is precipitated by hydrochloric acid without alteration, in the form of a white powder. It is also soluble in alcohol. Nitric acid decomposes it, and a new acid is the result.—*Annalen der Chemie und Pharmacie.*

UNGUENTUM VERATRIÆ.

An ointment, composed of two grains of veratria and half an ounce of lard, has been used in frictions, in the clinical hospital at Turin, in cases of rheumatismal pains. It was rubbed in night and morning, and in three or four days the pains were removed, and the limb had regained perfect freedom of motion.—*Bellingieri, Prospetto Clinico.*

EXTRAORDINARY BIRTH.

A dead child was born, the head, right foot, left hand, and umbilical cord, all presenting at once. The right parietal bone of the head was applied against the pubes of the mother; the left was turned backwards, with the sole of the right foot resting on it; this latter being covered by the left hand, the back of which lay against the hollow of the sacrum. When arrived at the vulva, the left hand was protruded before the head; the body of the fœtus, after its birth, preserved the same position as it had in the womb.—*Dr. Schnackenberg.—Neue Zeitschrift fur die Geburtskunde.*

SINGULAR CASE OF MONSTROSITY.

Dr. Rodenstab, in a communication, entitled Practical Remarks on Labour, published in the "Neue Zeitschrift, fur die Geburtskunde," has given the particulars of the birth of a living monstrosity, without any cranium. The mother was delivered by the forceps. A fortnight after birth, points of ossification were developed in different parts of the head, and at the end of two months, the cranium resembled that of an ordinary newly-born infant. The child, a male, three years old at the date of the report, differs only from other children by the great size of the fontanelle.

EXTIRPATION OF THE UTERUS.

Rosa Gazzola, 38 years old, was attended in her fifth confinement, in 1837, by a *soi-disant* sage femme. She was well delivered, but after the expulsion of the placenta, she suffered from intense uterine pains, and a feeling of weight in the vagina. The midwife examined her, and stated that these pains were caused by the presence of another child in the uterus. In pursuance of this opinion, she introduced her hand

into the vagina, said she felt the child, seized it, and made great and forcible traction. The patient felt that she was being lacerated; four strong men were holding her, while the midwife continued her efforts at traction. At last, after unheard-of efforts, the pretended child was dragged out of the vagina, and the midwife remarked that the nates were born, the rest of the body was behind. In order to aid her efforts, she wrapped up the protruded portion tightly in a handkerchief, and continuing to pull, she finally tore away the entire uterus from the body of the unfortunate mother.

Dr. Peracchi, who was sent for, found tremendous hæmorrhage, and the patient constantly fainting. She appeared like a corpse, the pulse could not be felt, a large quantity of the bowel protruded through the vulva, and the vagina was full of coagula of blood. The doctor was much alarmed at the state in which he found the unhappy sufferer, and still more so when he ascertained the womb had been torn away. He returned the bowels, raised the pelvis, &c., and had recourse to cordials; the patient gradually revived; fever set in, requiring bleeding, &c.; and the poor woman finally recovered.

At the period when the catamenia should be present, Gazzola suffers from general prostration, oppression, vomitings, headaches, and abdominal pains. Her hair has fallen, the face is pale, the muscles thin and, as it were, atrophied; the voice is harsh and disagreeable; speech difficult. The vulva is natural, the vagina about three inches long, and terminating by a thin yielding cul-de-sac. At the antero-superior part of the canal is an irregular, hard, and painful cicatrix, about an inch and a half long. The urine and fæces pass with difficulty and pain. The examination of the organ showed it was completely torn away, together with the Fallopian tubes and broad ligaments.

The midwife was proceeded against criminally, and sentenced to one month's imprisonment and a small pecuniary fine.—*Annali Universali di Medicina.*

NECROSIS OF THE OS CALCIS.

M. Mallespine, who has examined a great many cases of necrosis of the os calcis in children, states that, although generally dependant on a constitutional cause, it remains a long while without affecting the other bones of the tarsus, and that, in general, the only operation needed is the extraction of the sequestrum, instead of the amputation of the leg. This latter operation, he says, is more frequently practised than needs be, because the tumefaction of the cellular tissue, which is sometimes enormous, the situation of fistulous openings at a distance from the os calcis, and the lateral mobility of the foot (the result of the destruction of the os calcis, whereby the heel has lost all power of resistance), induce the practitioner to consider the disease more advanced and more extensive than it really is. He observes, further, that the absorption of the sequestrum takes place very rapidly, and that the new bone destined to supply the place of the diseased one, is deposited in the first instance on a level with the insertion of the tendo Achillis, and at the point corresponding to the calcaneo-cuboid and astragalo-calcanoid articulations. The articular cartilages are not destroyed, and generally continue intact a long while; the ligamentous apparatus is generally found friable, softened, and thickened; occasionally, appearances have presented, as if nature were about to supply the place of the lost ligaments by a fresh apparatus.—*Revue Médicale.*

WOUND THROUGH THE STERNUM AND THE ARCH OF THE AORTA.

The peculiarity of this unique case is, that the wound was made with a common dinner-knife, only moderately sharp at its point, and its edge three and a half inches long, and three-fourths of an inch broad. With this a man stabbed his wife up to the hilt. She died in an instant, and the wound was found to have passed through the upper part of the sternum, into the arch of the aorta and the right lung. The bone was cleanly pierced, without any fracture or splintering.—*Casper's Wochenschrift.—Medical Review.*

SUPPOSED NASAL POLYPUS.

A young woman was admitted into the Hotel-Dieu, of Clermont, for the removal of a nasal polypus, of which she presented all the symptoms. A whitish round body filled up the nares, and a probe passed up by the side was stopped in its progress by its pedicle. Attempts were made to remove it in the usual way by the forceps, but in vain, and each effort was followed by severe pain in the head; another examination was accordingly instituted, when it was discovered that the supposed polypus was no other than an hypertophied state of that fold of the Schneiderian membrane which covers the free edge of the inferior turbinated bone. It was removed with a pair of curved scissars without the loss of a drop of blood.—*Journal des Connaissances Médico-Chirurgicales.*

IODINE IN HYDROCELE.

Owing to a serious accident, the infiltration of the injection in the cellular tissue of the scrotum, which happened in a case in the Native Hospital, Calcutta, under his care, Mr. Martin was induced, in 1832, to abandon the old operation, and, in the next case that presented itself, to have recourse to an injection of the tincture of iodine diluted with three parts of water. Of this, two common urethra syringesful were used, and retained, the scrotum being moved about so as to bring the fluid into free contact with the entire surface of the vaginal cavity. The case was perfectly successful, and since then, 2,393 cases have been so treated at the Native Hospital. The advantages of this operation over the others are considered by Mr. Martin to be, that it is more simple, more certain, and more easily performed; that serum has not in any case been reproduced; little care is required in the after treatment; the cure is effected in a shorter time; and the operation is entirely free from the risk of infiltration, owing to the quantity of injection being comparatively small, and from its being retained within, and applied to the cavity of the tunica vaginalis. The inflammation produced by the iodine solution attains its maximum in a shorter period, and subsides sooner than that caused by any other stimulant. Comparative experiments with the iodine, port wine, tincture of cantharides, sulphate of zinc, &c., show the marked superiority of the former. The iodine seems to exert its constitutional, as well as its local action, for a few hours after the operation a nauseous, coppery taste is generally complained of.—*Lancet.*

KING'S COLLEGE MEDICAL DEPARTMENT.

The annual distribution of prizes to the medical students of this college took place last week. The following were the successful candidates for honour, &c. :—

Medical Scholarship — Scholar elected, George Johnson; prize, Thomas Inman.

Medicine, Surgery, and Midwifery — First prize, George Johnson; second prize, John Percival.

Materia Medica and Physiology—First prize, William Henry Parsey; second prize, Alfred B. Andrews.

Anatomy and Chemistry—No first prize awarded; second prize, B. L. Jemmett.

Botany—J. Baxter Langley.

Forensic Medicine—Robert Phipps Dodd.

Comparative Anatomy—Alfred C. Barker.

Medical Society's Prize—First, George Johnson; second, John B. Langley.

Warneford Prizes—First gold medal and books, George Johnson; second ditto, George P. Atkinson.

Leathe's Prizes — F. J. Henley and Boughton Kingdom.

Medical Associates — George Jackson, Boughton Kingdom.

Certificates of Honour in Medicine, Surgery, and Midwifery, to H. J. Hunter, R. W. Woolcombe, and J. G. Grylls—Materia Medica and Physiology, to S. H. Steele and Thomas Hawksley—Anatomy, to C. Barrett and R. Roberts—Botany, to M. S. Todd, S. Blount, S. M. Steele, and H. S. Lyford—Forensic Medicine, to John Percival, E. Thomas, and C. W. Mann.

PROMOTIONS AND APPOINTMENTS.

NAVAL.

Assistant-surgeons—C. A. Anderson, to the Howe; Richard Tilson, to the St. Vincent, for service at Haslar Hospital; J. Risk, to the Caledonia; G. R. West, to the Camperdown; W. T. Grudgen, to the Impregnable; Dr. Alexander Armstrong, to the Resistance; W. H. Sloggett, to Haslar Hospital; Sidney Bernard, to the Caledonia; H. Piers, to the Cleopatra.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted on Friday, May 6, 1842.

Francis Nathaniel Greene, Henry Charles Curtis, Thomas Gaskell, Henry William Watson, John Perry, John Alfred Carr, Henry Dixon, George Frederick Whately, Augustus Prater, Thomas Harvey Lawry, Thomas Bridge Trowbridge, George Taylor.

Monday, May 9, 1842.

William Henry Carnegie, Samuel Nathaniel Elliot, Herbert Baillie, William Baillie, John Mills, Augustus Hardy Godby, James Henry Reynett, Robert Dalvelle Ward, Henry Gaskell, Henry Woodward, John Teare, William Murdock.

APOTHECARIES' HALL.

Licentiates admitted April 21, 1842.

C. P. Stevens; A. T. Chandler, Godalming; W. Batley; A. C. Fenoulhet, Weymouth; H. B. L. Brock, Colchester; W. T. Boddy, Beaconsfield; T. Boycott, Exeter; R. Brown, Burderop, Wiltshire; R. Dendy, Sussex; E. Allen, York; H. D. Fowler, Cheltenham; J. N. Day, Chudleigh near Exeter, Devon; R. S. Donnall, Falmouth; J. Jeffree, Surrey; T. Inman, Liverpool; B. Booth, Derbyshire; R. Gee, Denbigh.

BOOKS RECEIVED.

The Nervous System and its Functions. By Herbert Mayo. London. Parker, 1842. 8vo, pp. 182.

Chemistry in its Applications to Agriculture and Physiology. By Justus Liebig. Second Edition. By Lyon Playfair. London: Taylor and Walton, 8vo, pp. 409.

Eighteenth Annual Report of the Visitors of the Gloucester Lunatic Asylum.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

The papers and communications of *Dr. Scott, Mr. Hunt, Mr. Newnham, Dr. Tweedale, E. S., Mr. Pope,* and *Mr. Niven,* shall appear in our next Number.

Amicus Justiciæ.—We cannot see how justice is concerned in the matter. The dispute is merely one for notoriety between a *great* and a *small* quack, with neither of whom shall we interfere.

ERRATA.

In Dr. Hunter's paper on lunatic asylums, page 89, col. 2, line 60, for "Ignatus," read *Ignotus.* Page 90, col. 2, line 39, for "This," read *His.* Page 92, col. 1, line 18, for "question," read *quarter;* col. 2, line 35, for "dirt," read *dub;* line 38, for "entire," read *calm;* line 60, for "disquisition," read *designation;* line 61, for "this," read *his.* Page 93, col. 2, line 44, for "one," read *on.*

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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PROVINCIAL MEDICAL JOURNAL

And Retrospect of the Medical Sciences.

No. 7.—Vol. II.] LONDON, SATURDAY, MAY 21, 1842. [PRICE SIXPENCE. Stamped Edition Sevenpence.

ON BRONCHORRHŒA ÆSTIVA,

OR

HAY-FEVER.

By R. Wakefield Scott, M.D., Liverpool.

As the season is approaching at which this peculiar affection occurs, and as your Journal possesses an extensive circulation in the rural districts, I am induced to offer a few observations respecting its pathology, and the means which I have found effectual in shortening its duration, and preventing its recurrence.

I have had an opportunity during the last few years of observing the origin and progress of a very obstinate case of this disease, which had recurred annually for fifteen years, usually continuing during the entire summer, and ceasing only at the commencement of autumn, and confining the patient almost wholly to the house.

It had been previously considered as an ordinary catarrh, occurring at an unusual season, and I must confess that it was not for some time that it appeared to me identical with the complaint known as the hay-fever or asthma, of which, though aware of its existence, I had seen no previous example.

The case was that of an unmarried lady, of middle age, of lax fibre, and leucophlegmatic temperament, in other respects enjoying good health, but who had, until the summer of last year, suffered attacks of greater or less severity during the period which I have mentioned.

The disease commenced with the symptoms of a common catarrh—sneezing, itching, and running of the eyes and nose, great dyspnœa, with a distressing cough, continuing occasionally, with little intermission for two or three hours, and accompanied with a profuse expectoration of thin frothy mucus, great languor and debility, with a feeling of weight and pain in the spine at the dorsal and lumbar regions, a quick and weak pulse, but without fever. She had been treated without the slightest benefit by leeches and blisters, expectorants and antispasmodics, and protracted abstinence. Upon inquiry into the history of the disease, I ascertained,—

1. That the time of its recurrence was irregular—that it took place very early in the summer, if the temperature was unusually high, and *vice versâ*—that on the first or second very warm day, especially if suddenly supervening at whatever period this change occurred, the sneezing, languor, and dyspnœa commenced—that the severity of the symptoms bore a relation to the elevation of temperature—and that its recurrence was retarded by removal to a colder situation.

2. I found, also, that exposure to cold air afforded relief.

3. That the symptoms were aggravated by a debilitating regimen and antiphlogistic treatment.

4. That an occasional stimulant, as wine or porter afforded much relief.

5. And that expectorants and antispasmodics were useless, and purgatives hurtful.

From all these circumstances it seemed clear that the disease was one of mere relaxation and passive congestion, especially of the mucous membrane of the air passages and of the lungs, exciting the dyspnœa and cough, and which were temporarily relieved by increased secretion.

The diminution of atmospheric pressure, the expansion of the blood, and the relaxation of the solids produced by increased temperature, especially if occurring rapidly, may, undoubtedly, in certain constitutions, lead to congestion of particular organs, by subverting the balance which must exist between the quantity and momentum of the blood and the resisting power of their capillaries.

The influence of this increase of temperature being general, its effects ought to be more or less general also, and hence, I apprehend, it will be found that most individuals of delicate constitutions and lax fibres, whose vessels are less capable of resisting any sudden change in the circulation, are subject to congestion, more or less general, at these particular seasons; in most cases the congestion is general, and occasions only a state of languor and oppression, and is relieved by increased perspiration; but in others it occurs locally, giving rise to diarrhœa, augmented biliary or urinary secretion, or hæmorrhage; and it is, I conceive, some comparative debility or minor contractile and resisting power, in the vessels of certain parts, as compared with those of others, which determines the locality of the congestion in particular individuals; and that it is this comparative debility of the capillaries of the air-passages and the lungs, aided perhaps by increased nervous irritability, which gives the predisposition, which must necessarily exist for the production of this species of bronchorrhœa.

Conceiving, then, that a general loss of tone, especially in the parts affected, was the origin of the complaint, it was obvious that the most appropriate mode of treatment must consist in strengthening the constitution generally, in which the vascular system might so far participate as to be able to maintain the equilibrium of the circulation during that change in its condition.

The plan which I adopted was to recommend a more nutritious diet, consisting of more animal and less vegetable food, and less fluids than ordinary, with one or two glasses of port-wine at dinner; the use of the shower-bath, which was persevered in during one entire year; and subsequently cold sponging of the throat, chest, and back, with an occasional aperient;

and from one to three grains of the sulp. quinæ in infus. cuspariæ three times a day.

This plan was commenced about a fortnight before the expected attack, and had the effect, in the first summer that it was adopted, of considerably delaying its recurrence, of lessening its severity, and shortening its duration. This was the case, in a still more marked degree, in the subsequent summer, the attack only continuing for a few days during the greatest heat, and during the whole of last summer the complaint was entirely absent. This tonic plan of treatment, which I find was recommended by Mr. Gordon * some time ago, was continued during the existence of the disease with decided benefit, as it became much milder, and of shorter duration; but I consider the most important object to be, so to prepare the system beforehand as to prevent its recurrence.

* Gordon, in Medical Gazette, Aug. 4, 1829, vol. iii, p. 411.

This affection, as the ordinary term implies, has been usually, and is by many still considered to arise from the aroma of hay,† or other vegetable substances, but, as I conceive, on no substantial grounds. In the case which I have related the attacks frequently occurred long before any grass had been cut, and in situations to which no such effluvia could be supposed to penetrate; the apparent connection has evidently arisen from the same degree of temperature which causes the grass to ripen, producing peculiar effects in certain constitutions. There is no doubt that the aroma of hay will readily produce a paroxysm in those affected, or may hasten the attack in the predisposed; but these are effects which it possesses only in common with other irritations, as the perfume of the bean or potato-flower, or dust, indigestible food, and mental emotions.

† Elliotson's Principles and Practice of Medicine, p. 720.

The non-occurrence of the usual attack, or its minor severity when the individual removes to the sea-coast, which has been supposed to depend upon the absence of vegetable effluvia, are much more satisfactorily accounted for by the lower temperature, the refreshing breezes, and the increased tone of the general system produced by such a locality. Various other circumstances, which might at first sight appear to favour the idea of its connection with such emanations, may, I conceive, be readily explained in accordance with the above views.

Liverpool, May 7, 1842.

CASE
OF
PROTRACTED DELIVERY.
WITH REMARKS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—The following case of midwifery, illustrative of the ill effects of the indiscriminate use of the ergot of rye, more particularly in first labours, I beg leave to transmit to you.

I am aware that much has already been written on this important subject, but I am also satisfied that much evil still results from the unskilful or unwarrantable use of this drug. I shall therefore make no apology to you for offering the following observations for insertion in the Provincial Medical Journal.

April 8, at five o'clock, a.m., Mr. P—— was summoned to attend Mrs. H——, aged 22, in labour of her first child. Slight labour pains had come on the previous night at ten o'clock, which soon subsided and did not return until the period of his being sent for. Mr. P—— remained with his patient until twelve o'clock, noon, when, finding that the labour did not progress with a celerity sufficient to his mind, he administered half a drachm of ergot of rye "to increase the pains," which dose he repeated in twenty minutes afterwards. Severe pains set in, and continued until about three o'clock, when they became feeble and were dying away—in other words, the uterus was becoming exhausted.

Mr. P—— being now at a loss to know what should be the next process of treatment, sent for my friend, Mr. F——, surgeon.

On this gentleman's arrival, the following was the state of matters:—

"Pulse 57; skin cool; no thirst; much agitated from the severe pains from the ergot." On examination, he found "the os uteri not fully dilated; soft parts rigid." Something was then said about "instrumental interference," to which of course Mr. F—— would not agree. This gentleman then left, promising to return in two hours. At the expiration of that time he found "the head had made a little progress." He recommended Mr.P—— to wait.

Half-past Ten, p.m. Mr. F—— was again requested to see the patient. He reports as follows:—"Found things much in the same state; frequent but not expulsive pains; a little progression of the head; bladder distended; bowels have not acted for thirty-six hours. A pint and a half of urine drawn off per catheter; to take sixty drops of tincture of opium immediately, and thirty more in two hours, if the pains continue; and after she has had some sleep, to take a tablespoonful of castor oil, or have an enema."

9. Half-past Ten, a.m. Mr. F—— again saw the case, and reports thus:—"After the second opiate had some refreshing sleep; feels much more tranquil; soft parts more yielding; os uteri fully dilated; some tenderness, and good deal of heat about the vagina; pulse 84; skin rather hotter; occasional slight pains; very little change in the position of the head. A dose of castor oil was given at eight, a.m., but has not acted; passed the catheter, and removed about a pint of urine; to be bled to ten ounces; to have half an ounce of castor oil, and an enema, with half an ounce of sulphate of magnesia, to be repeated, if necessary, in two hours.

Mr. F——, feeling assured that this state of matters was produced by mismanagement, and being unwilling to share alone with Mr. P—— the responsibility of the case, requested my attendance. On my arrival, at four, p.m., I found the following symptoms:—Pulse 96, not hard; not much thirst, skin a little hot; considerable exhaustion; in a state of alarm for her safety; proposing to submit to any process we chose for relief.

The pains were reported to have been somewhat sharpened by the bleeding, but were not efficient. Whilst standing by the bed she had one feeble pain, not in the least degree expulsive. On examination, I

found the head in the pelvis, in which position it had been for some time. There was some tumefaction, and considerable heat and tenderness of the external parts.

This was clearly a case of what the French call "*la tete arretée au passage;*" and the question which suggested itself was, whether the uterus could be again roused into action, and whether, if roused, its powers were adequate to the expulsion of its contents; or whether, on the other hand, the patient ought to be immediately delivered. The latter course was resolved on, and I proceeded immediately and delivered her, with the forceps, of a still-born male child. Uterus contracted tolerably well; placenta readily extracted; no hæmorrhage.

REMARKS.

It is impossible to escape the conviction that this was a case of perfectly natural labour, converted into one of difficulty by improper interference, and ignorance of the laws of parturient physiology, or from the administration of the ergot of rye from an unwarrantable motive.

Slight pains had come on, it would appear, at ten, p.m., of the 7th, which soon subsided. At five o'clock next morning they again set in, when Mr. P. was sent for. He remained with his patient until noon, when he administered to her, within the space of twenty minutes, one drachm of the ergot, and that whilst the os uteri was only partially dilated, and the external parts still rigid and unyielding, added to which was the circumstance of its being a first labour, and the patient a person of somewhat tonic fibre. As might be expected, severe but ineffectual contraction sets in, producing the quadruple effect of harassing the patient, wearing out muscular power, exhausting the uterus, and inducing the feelings of despondency and alarm. That more disastrous consequences did not result from the treatment employed was well for the poor sufferer, as well as the equanimity of conscience of the accoucheur.

What is the great cause—independent of organic lesion—of that fatal accident, rupture of the uterus? Is it not when the balance preponderates in favour of the resisting over the propelling powers? And when this state does exist unrelieved, one of two events must happen, either the above deplorable one, or the uterus exhausts its own power by its fruitless endeavours to empty itself, and a state of *inertia* of that organ is produced.

In the present instance the latter and lesser evil was the result; and it is very clear that this state was accelerated, if not entirely produced, by the proceedings adopted; for, instead of husbanding the patient's strength until the resisting parts became more yielding, timely administration of an opiate, or, on the other hand, endeavouring to overcome that resistance and rigidity by the proper means, we find the medical attendant at once having recourse to the ergot, and superinducing that state which even common sense ought to have dictated to him was inevitable.

I am far from endeavouring to condemn or undervalue the use of this drug. On the contrary, in the hands of the accoucheur of discretion, I believe it to be often an invaluable aid. It is its abuse I condemn—that indiscriminate and untimely application of it in cases like the above, where the fault—if, indeed, fault it be—lies not so much in the uterus itself as in the parts that oppose the uterus' action, and to which, therefore, ought the attention of the accoucheur to be chiefly directed.

The following prohibitary rules ought ever to be borne in mind by every medical man who practises this branch of the profession:—

1. "It should never be administered when nature is competent to a safe delivery.

2. It should never be administered until the regular pains have ceased, or are ineffectual, and there is danger to be apprehended from delay.

3. It should never be administered until the rigidity of the os uteri has subsided, and a perfect relaxation induced.

4. It should never be administered in any case of preternatural presentation that will require the fœtus to be turned."

To proceed. At four, p.m., finding that the pains were ceasing, Mr. P—— called in Mr. F——, and the result of that and a subsequent conference, two hours afterwards, was, that nothing then was to be done. Now, it is not to be doubted, that the most effectual means of rectifying the error already committed would have been the immediate administration of a full opiate, which would have at once insured for the patient a cessation of useless pain, procured some refreshing sleep, and given the uterus an opportunity of recovering its lost strength. At half-past ten, p.m., Mr. F—— had recourse to this remedy, though, perhaps, under less favourable circumstances.

On the following morning I was called upon by Mr. F——, and he described the case as above. I then suggested venesection, and this remedy might certainly have been had recourse to at an earlier stage of the proceedings. Now, it seems to have partly failed, not from a falling off of its effects as a relaxing agent, but from the now exhausted state of the *vis a tergo*, or propelling powers.

From this time up to that on which I was requested to see the case, matters continued much *in statu quo*.

On my arrival, it was very obvious, from the position of the head, the exhausted state of both the uterine and muscular systems, as well as the increasing tumefaction and tenderness of the external parts, that immediate delivery could alone insure the patient from mischief. On the means of accomplishing this object there might have been difference of opinion; and here I would inscribe my full concurrence in the plan of having early recourse to the forceps in all cases where there exists the least doubt as to the uterus accomplishing its task. "Of two evils," says Dr. Burns, "it is infinitely safer for the mother to interfere too soon than to procrastinate."

There are many practitioners who have a natural and strong dislike to the use of instruments, from what cause I know not, if it be not from a blameable ignorance of their application and advantages. Such men, whilst the head of a living child is within the reach of these instruments, will hang off, exhorting the struggling female to patience, until at last, it may be, wearied nature performs her task; but the fond hopes of the mother are blighted—her child is dead!

There is another class of men, and these are numer-

ous, whose aversion to the forceps is not so strong, but who, in cases like the present, would depend—at all events in the first instance—on the ergot; and it is not for me to deny the possibility of this medicine in the above case having succeeded in again rousing to action the torpid uterus; but, admitting that it would have done so, and that a safe termination to the labour might now have been accomplished through its agency, what advantages would there have been obtained which the other more speedy method did not possess?—and, on the other hand, what must have been its disadvantages? Protracted suffering, the probable death of the child (which unfortunate event, in the present instance, was clearly dependant on the application of these instruments being too long deferred), loss of time, danger of inflammation, sloughing, &c.

"The modern disciples of the school of patience, men of talent and observation, carry their fears of the mischief resulting from the use of the forceps to an extravagant length, and place a mistaken confidence in the efficacy and safety of the continued action of the expulsive powers. I have much pleasure, however, in strengthening my opinion with the authority of Dr. Hamilton,* the present excellent professor of midwifery in Edinburgh, who has long seen the hurtful effect of the temporising system, and of Dr. Osiander, the active and experienced professor in Gottingen."

In my own cases I have used the forceps in nearly 3 per cent.,† besides others where, as in the above case, I was called in as a consultant, and in no instance have I had reason to regret their application. The popular outcry against their use is the danger of the soft parts of the mother from laceration, &c.; that such danger exists, it would be improper to deny, but it can only exist in the hands of an injudicious or awkward operator; and though some address is required in properly applying the instruments, and even difficulties may be met with in doing this, still the former is readily acquired, and the latter generally overcome by a little experience and attention.

No young practitioner certainly ought to use the forceps who has not seen them applied by some one experienced in their use, or who has not had such a person by them when they have made their first essay; but with this precaution, and no particular circumstance forbidding their use, no accoucheur ought to stand tamely by and witness the agonising sufferings of a protracted labour, and risk the life of a child, whilst such an efficient means is within their reach.

I am, Gentlemen,
Your most obedient,
D. G. Niven, Surgeon.

Pershore, May 5, 1842.

* In the death of this eminent practitioner and talented and practical lecturer, the University of Edinburgh and the profession sustained a heavy loss.

† This may seem a large proportion when compared with the calculations of the Dublin school, those of Drs. Smellie, Merriman, Naegele, and others; but, notwithstanding such high authority, I am fully satisfied that this is, and even a higher average might be, perfectly consistent with sound practice; that it is a merciful one is indisputable. Could we unveil the scenes of suffering which the above eminent men—"disciples of the school of patience"—must have witnessed, we should behold a sad enough picture.

P.S.—Since writing the above, I have had occasion to use the forceps in another case of difficult labour in the practice of a friend. It was a first labour, and a case of twins. After extracting the first child I left, and learned afterwards that in the passage of the head of the second child, there occurred a partial laceration of the perineum—a fact, it must be admitted, strongly in favour of my argument for the use of these invaluable instruments.

VACCINATION DEFENDED AGAINST THE ATTACKS OF MR. BROWN.

Letter III.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I would willingly have passed over without notice Mr. Brown's conclusions; but, after much consideration, I have determined that to do so would be to yield some important ground to the anti-vaccinist, and to give an opportunity of triumph where defeat is sure. Mr. Brown concludes—

1. "From the whole history, statements, and opinions concerning the origin and practice of vaccination, it seems proved that the vaccine does not possess any greater specific or permanent influence over the human body than what is and may be possessed by many other kinds of virus; and, also, that many diseases and local affections may and do possess such a specific influence against the influence of other diseases, as the vaccine does exert against the contagion of small-pox, and in proportion to the extent of these actions, so may the extent of their power of prevention be calculated; indeed, there is reason for concluding that the anti-variolous power arises more from possessing what may be denominated a sedative power over the human body, than any quality arising, either as being a direct antidote or possessing a similarity of character to the small pox."

Now, this conclusion is drawn from the early history, imperfect statements, and erroneous opinions of the first promulgators of vaccination—statements and opinions which have been superseded by experience but which are now brought forward by Mr. Brown to prove—what? Why, simply, what every friend to vaccination will admit—that its influence over the human body is not greater or more permanent than what is possessed by many other kinds of virus; as, for instance, by the poison of small-pox itself, or measles, or scarlatina, or hooping-cough, or any other of the specific diseases which occur but once during life. Again, nobody questions the power of one disease to interfere with, or even to supersede, another malady; the pretensions of vaccination as a prophylactic against small-pox, and the occasional sources of its failure, rest equally upon this very law; and there is nothing extraordinary in the supposition that the disturbing effects of any one malady should be in proportion to the extent and energy of the disturbing cause. As to the latter part of this conclusion, assuming the sedative agency of the vaccine, it has been already replied to in my last letter. So that we see that the effect of this resolution, in so far as it can be divested of that

which is unphilosophical and untrue, is actually in favour of vaccination. We pass on to conclusion

2. "It is also incontrovertible that the local phenomena of the vaccine inoculation does (*do*) admit of a very great variety, without any seeming prejudice to its powers in enabling the human constitution to resist the small-pox, either from the test of inoculation, or exposure to the epidemic contagion. But from the very great variety in the extent and appearances of the vaccine phenomena, as well as the very great difference in the extent of the period which the human body is secured from small-pox, there is every reason to conclude that, in proportion to the severity and extent of the phenomena which characterise the vaccine process, so will be the extent of security against small-pox; and the proof is equally conclusive, that from no state of the vaccine phenomena can absolute and permanent protection be procured; nor does the increasing the number of vaccinated points increase the ultimate, absolute, and permanent security."

In this very remarkable conclusion is probably to be found the real foundation of all Mr. Brown's errors —that is, his belief that the process of vaccination admits of a great variety in its phenomena, without any seeming prejudice to its anti-variolous powers. Now the vaccine vesicle is a specific vesicle, runs a specific course, and has a specific termination, and as such, does not admit of a very great variety in its local phenomena without impugning its perfection. It is true that the vaccine vesicle will in its progress exhibit more or less of intensity, according to the physical temperament of the patient and the peculiar texture of his skin—that is, it is subjected to the same laws with all other eruptive diseases; but making all due allowance for this general law (which, therefore, no casuist can be allowed to adopt and argue upon as if it were peculiar), it may safely be averred, that in every instance the vaccine vesicle exhibits peculiar phenomena which it is impossible for an accurate observer to mistake; that without these peculiarities it is imperfect; and that, if imperfect, it cannot afford the same security against small-pox; but to argue upon the imperfect vesicle, as if perfect results were to be obtained from it, is most unphilosophical. We aver that no security can be expected against small-pox from an imperfect vaccination, and it is against the imperfections or incompleteness of this process that we would endeavour to arouse the attention of medical persons, in order that it may be carried up to its most perfect state, and thus afford the greatest attainable security against small-pox.

Mr. Brown's ideas appear very undefined to himself, for in this very conclusion he asserts that the security (comparative) against small-pox depends on the "severity and extent of the vaccine phenomena;" and yet he asserts that "increasing the number of vaccinated points does not increase the security." Now, this is most illogical; for if the degree of security depends upon the extent of the vaccine phenomena, then none can doubt that those phenomena, both general and local, will be increased by the number of points of irritation; and also, none can doubt that if a partial and temporary security is given by one vesicle, and a minor state of irritation, while that partial and temporary security is increased and prolonged by the extent and severity of the vaccine phenomena, there may, that there must, be such an extent and severity of symptoms as will afford permanent and absolute security against small-pox. The only remaining problem, then, is to ascertain the degree of this local and general irritation which may be required. So much for Mr. Brown's reasoning; it is clear that his own views are confused, and that we must receive all his reasonings, deductions, and inferences, with extreme caution.

We would just observe, that no real friend of vaccination, if well instructed, now contends for its affording an "absolute and permanent security" against small-pox. This is not its position. It is that, if perfect, vaccination affords the best possible security against the malignant influence of small-pox, and that this security is greater than that afforded by having previously been subjected to small-pox. We believe, too, that this security will be increased by a greater amount of attention to the minuter shades of more or less perfect vesicles, and more or less constitutional influence.

We pass on to Mr. Brown's third conclusion—viz., "that upon having recourse to the test of inoculating with varioline some years after the individual has undergone vaccination, the phenomena which ensue are not only widely different, but even the most characteristic pustule and distinct constitutional derangement, with more or less of an eruption of distinct small-pox, can be obtained.

What more can be asked for to prove the modifying influence of vaccination? When inoculation for the small-pox is employed as a test of the efficacy of vaccination some years after its employment, not only are the ensuing phenomena "widely different"—that is, almost nothing, or purely local irritation from the introduction of a morbid animal poison, but even (that is the exception to the general rule) the most characteristic pustule can be obtained—that is, even in this rare exception, the characteristic pustule can, not *is*, but *can* with difficulty be obtained. Divested, then, of prejudice and partiality for a favourite hypothesis, we shall find this resolution amount to nothing more than that variola can be be produced after vaccination in some rare instances; take away from these the cases of imperfect vaccination, and the result will probably be very nearly the same with that of secondary small-pox. It is but fair, in the present place, to state the result of my counter experience on this subject. I, too, have tested the efficacy of vaccination by small-pox inoculation, but have never succeeded in obtaining a characteristic pustule passing through its regular course. I reside in a parish of about seven thousand souls, peculiarly liable to the introduction of small-pox, from the annual influx of its occasional population, of about five thousand souls, during the season of hop-picking. Small-pox has been introduced many times during the last thirty years, and several times it has visited us in its epidemic character; yet it has never spread to any extent, and why? because vaccination has, for twenty-five years at least, been sedulously propagated, and, therefore, the number of unprotected individuals is comparatively small. I do not say that I have not, during this period, seen a few cases of small-pox after vaccination, but they have been greatly modified; I

have never seen one case in danger; while the secondary cases of small-pox which I have seen have been far more severe, and two have died; thus establishing my position of the greater security afforded to the patient from the malignant consequences of small-pox. To this I should add, that during the last thirty years I have had nine pupils and six assistants; these had all been vaccinated; when a case of small-pox has occurred, they have been invariably anxious to watch over such case most sedulously, for the sake of acquiring a knowledge of what is now a rare malady; and, desirous of testing their own security; they have sat for hours in the patient's confined room at the pest-house; they have breathed the patient's breath, and laid down upon his bed for a longer or shorter time; and yet what has been the result? Perfect immunity! The family at the pest-house also had been vaccinated, yet no instance of failure occurred. These, however, were young; not so my pupils and assistants, but ranging from sixteen to thirty. Let it not be said that they possessed the freedom from susceptibility, which is given by professional fearlessness, for scarcely one, if one, escaped scarlatina during their residence with me. Fact against fact. I am indeed aware that the number of cases is too small to admit of general inference, but I do not hesitate to affirm, that such a result could not have happened to the unprotected. "Valeat quantum valere possit."

I will not occupy your space by copying Mr. Brown's fourth conclusion, and only very briefly notice its extraordinary contents. He first states, that cases of small-pox after vaccination were not heard of for the first few years after its introduction; and hence wishes to infer, that the influence of vaccinia is temporary, as if such inference were at all justifiable; and as if, in fact, the phenomenon, if true, were not much more readily accounted for by the paucity of cases which, at that early period, could be subjected to variolous infection.

I admit that, from the multiplication of vaccinated persons, especially of individuals carelessly and imperfectly vaccinated, and from the presence of variolous epidemics, the number of cases of failure has apparently increased; but I take leave to deny his assertion, and challenge him to the proof, "that the fatal effect of small-pox succeeding to vaccination actually exceed (exceeds) the proportion of twenty to one those which were found to attend the practice of inoculation." I suppose it is intended to say, that death occurs with greater frequency in the former over the latter cases in the proportion of twenty to one. Now, as the proportion of deaths from epidemic small-pox has usually been, in round numbers, about twenty-five in one hundred—and that from inoculated small-pox, about four in one hundred—it will follow that this number multiplied by twenty, will give the proportion of deaths from small-pox after vaccination as eighty in one hundred!!! We challenge Mr. Brown to the proof. We are quite ready to allow the ravages of small-pox upon the unprotected, and to bewail the indifference which has been produced amongst the poor towards the practice of vaccination, partly and chiefly from their belief of the great infrequency of small-pox, and partly from their prejudices, fostered and preserved by the designing and interested inoculator, or by the perverse and misguided sons of intellect and science, such as Mr. Brown.

On the subject of Mr. Brown's fifth conclusion, I am only prepared to say, that I believe similar errors and imperfections attend the theory and practice of vaccination in other countries as well as in our own; the reasoning, therefore, which is applicable to the one is applicable to the other.

With regard to the last conclusion, we readily yield to Mr. Brown, that it is absurd to contend for the absolute security afforded by vaccination; none but the most unwary and injudicious friends of vaccination contend for its giving perfect immunity. We also yield the point as to the comparative frequency of small-pox after small-pox, and small-pox after vaccination, although it is not easy to institute a comparison between the few inoculated, and the many vaccinated, of the present generation. But we can afford to yield the point—what we contend for is, simply, that the mortality in the cases of small-pox after small-pox is greater, cœteris paribus, than in small-pox after vaccination.

I trust you will forgive me for having occupied so much of your space in combatting Mr. Brown's conclusions. On a subject of such vital importance to the community as well as to ourselves it appears to me desirable to show the illogical reasonings of my antagonist, and, if you are not tired with your correspondent, I shall hope to resume the subject next week.

I am, yours faithfully,
W. Newnham.

May 10, 1842.

ON THE RADICAL CURE OF REDUCIBLE INGUINAL HERNIA.

By Dr. Carl Haller, Vienna.

Case I.—Joseph S., aged 23, was affected with inguinal hernia on the right side; the tumour was about the size of a pigeon's egg, and easily reducible. Such was the state of the patient in the year 1837. In May, 1840, he was admitted into hospital, for the purpose of undergoing an operation. The tumour was now as large as a hen's egg, and contained a small coil of intestine; the external abdominal ring was sufficiently enlarged to admit the end of the index finger.

On the 26th of August, 1840, the bowels having been previously emptied by an enema, the operation was performed in the following manner:—The skin of the scrotum was pushed up, with the index finger, into the inguinal canal, and, with a *sonde a dard*, two ligatures were passed through it and the walls of the canal. A compress of lint was now passed up as high as possible into the canal, and the ligatures firmly tied over it on two quills covered with sticking plaster. The part was covered with ice-cold lotions, the scrotum supported with a suitable bandage, and the patient ordered to keep perfectly quiet in bed. The pain which followed was not very severe, but the parts became much swollen and hard, and on the seventh day there was some slight fever. The liga-

tures were now divided and the compress removed. The discharge of pus ceased on the fourteenth day. On the twenty-eighth day an elastic truss was applied, and the patient allowed to move about a little. The abdominal ring was, at this period, very small, and no protrusion of the tumour occurred when the patient coughed violently. Ten days afterwards the patient left the hospital and returned to his usual employments. The use of the truss was continued for several months, and on the tenth month after the operation the patient was dismissed from the house of correction perfectly cured.

Case II.—Joseph S., aged 19, was admitted into hospital on the 26th of October, 1840. He had laboured under a left inguinal hernia for five years; for twelve months he wore a truss, but then left it off. The tumour only descends in the upright position, is the size of a hen's egg, and is easily reduced. The operation was performed on the 28th of October in the manner already described.

On the 3rd of November, the tumefaction and redness extended up for several inches above the ligatures, and some pus escaped from the latter. The ligatures and plug were now removed and tepid water injected into the cavity, which discharged a good deal of pus.

Nov. 14. The suppuration has ceased, and the ligature wounds are healed, but the invaginated integument is beginning to sink down. On the 24th the integument had completely descended beyond the external ring, which, however, was much smaller than before the operation; the hernia did not come down on coughing or pressure being made. Three months after this the patient was attacked with severe catarrh, and coughed violently, but had no relapse of his rupture. In this favourable state he continued for six months, and thought himself cured, when, on the seventh month after violent straining at stool, the hernial tumour descended as before.

In the third case, also, the cure was only temporary, the gut having escaped on the fourth month after the operation.

Case IV.—Gustavus T., aged 26, had suffered from inguinal hernia of the left side during four years. The tumour was the size of a hen's egg, easily reducible, and the ring admitted the end of the index finger.

The operation was performed, in the usual way, on the 15th of March. Very slight reaction took place; on the fourth day there was a little fever; the ligatures, &c., were removed on the seventh day; the discharge of pus ceased on the fourteenth day; on the twenty-eighth day the patient was allowed to leave his bed, being furnished with a truss; the external ring was not obliterated at this time, although, on passing the finger into the canal, a slight impediment could be felt; the tumour did not appear on violent coughing or exertion. The patient left the hospital on the 19th of April, and was discharged from the house of correction on the 30th of August (six months after the operation), without having suffered any relapse.

Case V.—Michael C., aged 27, had a hernial tumour on the right side, as long back as his recollection goes. He was admitted on the 17th of February, 1841; the tumour was as large as a goose's egg; composed evidently of intestine, and easily reduced. The operation was performed on the 19th of February; soon afterwards the epigastric region became painful, but this subsided quickly, and the pain was confined to the part operated on. On the fourth day some slight febrile action took place. The ligatures and quills were removed on the sixth day, and the plug on the following day. On the twenty-eighth day the patient went about with a truss. The invaginated portion of integument had now completly come down, but the external abdominal ring was considerably narrowed, and the hernial tumour did not appear on coughing or exertion. The patient was dismissed from hospital on the 5th of April, and was employed in various laborious occupations until the 25th of August, 1841, when he was discharged from prison, without having experienced the slightest return of his hernia.

Case VI.—Johann F., aged 38, a strong, healthy man, had congenital inguinal hernia of the left side. When admitted into hospital on the 30th of July, 1841, the tumour was as large as a man's fist, elastic, and easily reduced. The operation was performed on the 6th of August without any difficulty.

In this case the reaction was greater than in any of the former. There was considerable tumefaction and pain, sense of oppression at the stomach, and some fever during the two days which immediately followed the operation. Castor oil was administered, and great relief followed the evacuation of the bowels. The ligatures and quills were removed on the sixth day; after the third week the discharge of pus has completely ceased. The results of the operation were, however, only temporary; for about eight weeks afterwards the intestine came down again, and the hernial tumour soon acquired its former volume.

Case VII.—Franz R., aged 35, was affected with inguinal hernia of the left side, from the age of seven years. The tumour in this case was large, and the external ring very much dilated. The patient underwent the operation on July 19th, and on the twenty-eighth day was allowed to go about with a truss. The ring was now very much contracted, and the tumour did not come down when the patient coughed or made strong exertion. He was discharged six months afterwards without having suffered any relapse of his complaint.

During the past year, Dr. Günther has performed the operation of herniorraphy twelve times, on young and healthy individuals, affected with moderate sized hernia; the method of operating selected was that recommended by Schuh. All the patients left the hospital cured, and, in several, the cure was ascertained to have been permanent after a lapse of several months. There is no doubt, however, that an essential condition of cure is the remaining quietly in bed for four weeks at least, and to this few patients would submit, unless after an operation. — *Medic. Jahrbücher*, 1842.

The next annual meeting of the Association of Medical Officers of Hospitals for the Insane will be held at Lancaster on Thursday, the 2nd of June next, at twelve o'clock.

CASE
OF
PARACENTESIS PERICARDII.

By Dr. Skoda, Vienna.

The subject of this case,* a youth, 19 years of age, was admitted into the general hospital, Vienna, on the 1st of July, 1841. The patient had been labouring under symptoms of pneumonia and pericarditis for some time, and when admitted, presented the following symptoms:—

The face was pale and slightly œdematous; respiration short, and very difficult; the sound on percussion was dull over the whole of the precordial region, and over the heart there was an evident projection; on ausculting the left side, a strong *bruit de frottement* was heard; skin cool; bowels open; pulse 112, small, irregular, and occasionally intermittent. The patient complained of a constant sensation of pressure in the epigastrium, especially when lying on the left side.

The diagnosis which was formed of the disease was, effusion into the cavity of the pericardium, in consequence of pericarditis; some effusion into the right side of the thorax; and condensation of the lung. The patient was at once placed under a full course of mercury, which was continued during three weeks. Some benefit was obtained from this treatment; the respiration became easier; the pulse fell to 104-112, and was seldom irregular; the lung became more free; the physical signs of effusion into the pericardium still, however, continued; and although the projection over the heart was less on the 14th of July, and the *bruit de frottement* was considerably circumscribed on the 20th, still the presence of effusion in the pericardium could not be doubted. On the 15th of July, frictions with mercurial ointment were substituted for the calomel; but as no further benefit was derived, the operation of puncture was performed on the 5th of August. The point chosen was about two inches from the left edge of the sternum, in the fifth intercostal space, and about one inch below the nipple. Three drachms of reddish serum escaped through the wound; a sound was now passed through the canula, and afterwards the exhausting pump applied, but no more fluid escaped. The patient was placed in a different position; desired to hold in his breath, and, strong pressure being made at the same time on the abdomen, a large quantity of fluid came away. It was of a brown-red colour, towards the end contained flakes of lymph, and amounted to more than three pounds. During the operation the pulse continued at 112; the patient felt much relieved by it; but percussion seemed to indicate the presence of about a pound and a half more of fluid in the pericardium. The removal of this it was decided to leave to nature.

Aug. 6. Respiration short; pulse 112; sound on percussion dull over the lower third of the chest, on the left side. Sixteen ounces of blood were drawn from the arm, and the bowels freely opened with infusion of senna. Up to August 10 the effusion into the pericardium continued to increase, as was evident from the dulness on percussion, projection of the intercostal spaces, and increased *bruit de frottement*. The pulse varied from 116 to 120. The infusion of digitalis was ordered.

From the 6th to the 21st of August the symptoms remained without much change. They were combatted with mercurial frictions and the internal use of the hydriodate of potass, but without much benefit. On the 22d a second puncture of the pericardium was made, in the site of the former operation. Only a few drops of dark-red serum escaped. The patient was now placed on the edge of the bed, and the fluid allowed to escape by drops through the canula for about two hours. At the expiration of this time three quarters of a pint of turbid serum had been discharged. The canula was now withdrawn, and a gum elastic catheter introduced in its stead, the external opening of the instrument being guarded by a piece of bladder to prevent the introduction of air. The fluid continued to flow in this way during four hours, and about a quarter of a pint came away, making the total quantity evacuated one pint.

On the following day the respiration was easier; pulse small, 108; cough severe; the projection of the left side of the chest was much diminished. The amelioration produced by the operation was, however, of short duration. On the 4th September some fluctuation was discovered in the abdomen; the extremities became œdematous; the respiration accelerated and difficult; and the patient died in a state of asphyxia on the 12th October.

Post-mortem Appearances.—There was nothing worthy of notice in the cavity of the cranium. The left side of the chest contained about eight pints, and the right side five pints of greenish serum. The right lung was pressed backwards against the vertebral column, and infiltrated with serum; the left was compressed in like manner, and there was a tubercular cavity, of the size of a hazel-nut, with several crude tubercles in the lower lobe. The anterior surface of the pericardium, opposite the fifth and sixth ribs, was united to the wall of the chest; it was thickened, and adhered, by a great part of its anterior surface, to the heart; at the lower and back part were several ounces of a yellowish fluid, containing flakes of lymph. The heart was large, and its cavities dilated. There was a considerable quantity of flocculent fluid in the cavity of the abdomen.

REMARKS.

In this case the commencement of pericarditis was not attended by any of its usual symptoms, and a considerable effusion had taken place before any difficulty of breathing whatever occurred. On the second day after the patient's admission into hospital he was seized with pleuro-pneumonia. The difficulty in extracting the serum on the second operation is explained by the adhesion between the pericardium and heart anteriorly, and about this time, also, the pericardium must have become united to the wall of the thorax, for the rubbing sound then disappeared.—*Medicin. Jahrbücher*, March, 1842.

* For another case of the same kind, see "Provincial Medical and Surgical Journal," vol. II., 1840-1, p. 376.

Paracelsus was the author of 230 works on philosophy, 46 on medicine and surgery, and 7 on mathematics.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, MAY 21, 1842.

The chair of surgery in the University of Edinburgh is placed at the disposal of the town council by the death of Sir Charles Bell. Several candidates for the professorship have already declared themselves, amongst whom are mentioned the names of Mr. Lizars, Dr. Handyside, Mr. Robertson, and Mr. James Miller. The day of election has been fixed for the 19th of July next.

The candidates at present in the field for the chair of surgery are, we believe, exclusively medical gentlemen resident in Edinburgh; but it is probable that on this, as on former occasions, candidates from different parts of the empire will dispute the honour of becoming attached to an university which still holds a distinguished rank amongst the medical schools of Europe.

The professors in the University of Edinburgh are, as is well known, appointed by the members of the town council. The task is rather a delicate and a difficult one; but the duty has, generally speaking, been fulfilled by the council in a manner which reflects high honour on their probity and discretion. Few schools of medicine can furnish a succession of brighter names than those recorded in the annals of the medical faculty of Edinburgh. Indeed, the existence of Edinburgh, as a school of medicine, is intimately connected with the position which its teachers hold in the estimation of the public. In point of population, Edinburgh ranks below many provincial towns; its hospitals are comparatively insignificant; the facilities of anatomical study are few. These disadvantages, however, have been, and are still, counterbalanced by the reputation of the professors attached to the medical school of the university. To uphold—if possible to increase—this reputation, is peculiarly incumbent on the members of the town council at the present juncture, when they are called upon to name a successor to Sir Charles Bell—to dispose of one of the most important offices connected with the medical department of the university.

We are induced to make these observations in consequence of certain rumours which have reached us relative to the vacant chair of surgery. The present candidates, as we have said, are all Edinburgh men; they are unexceptionable both in point of personal respectability and professional attainments; but it is evident that many other candidates will, in course of time, present themselves. It is, therefore, highly incumbent on the members of the town council, and on those connected with that influential body, not to take any steps which may impede the free choice of the best qualified candidate when a complete list shall have been placed before them. This point was particularly alluded to by Bailie Richardson, at a recent meeting of the town council, when several other members expressed a hope that no pledge or promise of support would be given to any individual until the relative merits of the different candidates and the interests of the school had been duly and fully canvassed. In the absence of any test whereby the merits of a candidate can be practically ascertained, this is the only just and prudent course which the council can adopt, and we trust that the council will pursue this course, as they have hitherto done, to their own credit, and the advantage of the university. If we can believe certain rumours which are afloat, the members of the medical faculty and the managers of the Royal Infirmary have indirectly countenanced the application of a particular candidate. This is unjust and impolitic. The interests of the present professors are deeply engaged in the choice of their future colleague; the character of the university is already slightly blemished by the existence of one or two professors, whose energies are sadly impaired by the weight of years; and we do not hesitate to affirm that the accession of a young and vigorous intellect is necessary for the well-being of an institution in which the seeds of decay have been thus allowed to germinate.

The attempt of the poor-law commissioners to bring under their yoke the medical profession in Ireland has, as we anticipated, aroused the most determined and active opposition to their measures, on the part of the profession and the public.

It was not to be expected that the Irish landed proprietors, already heavily suffering under the pressure of tithes and poor-rates, would quietly submit to an increase of taxation which would probably amount to one hundred thousand pounds per annum. The charitable portion of the community, also, look with amazement and indignation on a measure which would dry up the sources of benevolence and completely sever the bonds which unite the rich man to the poor in a disturbed and unsettled society.

But beyond all, the members of the medical profession have reason to reject or resist a proposition which would deliver them up to the uncontrolled domination of men on whom long and dearly-bought experience has taught them to look with distrust, if not with abhorrence.

The medical profession cannot submit to any further control of the poor-law commissioners, without abdicating their rank in society. The enactments of the Irish Medical Charities' Bill fully demonstrate this—if any proof were wanting after the sad experience

which we have had of the Poor-law and Vaccination Acts.

The 56th section of the proposed bill gives the commissioners full power "to dismiss any medical officer, either upon or without any suggestion or complaint, and to render such person, so dismissed, incapable of serving in any other medical charity without the consent of the commissioners."

But this, bad as in all conscience it is, does not satisfy the dictatorial cravings of the commissioners; their regulations must have the force of "written law," and any infringement of them must be punished by fine, imprisonment, and hard labour. By the 86—88th sections of the bill it is enacted "that the orders, when sealed by the commissioners, shall have the force of law, and disobedience to them shall subject the offender, for the first offence to a fine of forty shillings; for the second offence, of five pounds (recoverable summarily before two magistrates); and for the third and every subsequent offence, to indictment for a misdemeanour, fine of not less than twenty pounds and imprisonment, with or without hard labour."

Assuredly this exceeds anything which has hitherto been attempted in the annals of penal enactment, and if the members of the profession submit to it, richly will they deserve the agreeable occupations reserved for them in the pounding of hemp and the breaking of stones. To enforce the exercise of duties connected with charity and brotherly love by an appeal to the treadmill is an expedient worthy of the poor-law commissioners, and in keeping with all their acts; but we cannot for a moment believe that such a principle will be tolerated by the public. Already has it been denounced in energetic and unqualified terms by a most numerous and influential assemblage of medical men, held on the 12th ult., in the city of Cork. The proceedings of this meeting, which reflects the highest credit on the spirit and activity of the Cork practitioners, are fully reported in the "Constitution" of May 14. We regret that our space will not admit of more than a cursory notice of the meeting and the resolutions unanimously adopted at it. Almost every respectable practitioner in the city and county of Cork was present. The chair was occupied by Dr. O'Neil, of Fermoy; Dr. Corbett, of Inoshannon, acted as secretary. The meeting was addressed by the chairman, secretary, Dr. S. Wood of Bandon, Dr. Murphy, Dr. Armstrong, Dr. Haines, Dr. Grattan, Dr. Osborne, Dr. Bull, and several other gentlemen. Dr. Bull produced considerable effect by reading the following extract from a letter written by Mr. Phelan on the 27th August, 1837:—

"We had to point out the provisions most necessary to ensure to the sick poor proper medical relief, and to the profession adequate remuneration, under such a system as would not affect the feelings or respectability of the latter. To obtain this, it was necessary that the poor-law commissioners should not be the controlling power, as the Poor-law Bill proposed, over the medical charities of Ireland." * * * * "But then comes the rub; 'if,' say the poor-law commissioners, 'any part of the funds for your medical charities be raised through us, we must have the control over these charities.' These are Mr. Nichols' words, and they are those of many friends to the profession. Much, therefore, will depend on the latter; if they assume a decided attitude, and show that the members of their own profession are as trustworthy as the poor-law commissioners, and as likely to raise and disburse funds equitably and judiciously, Government and Parliament may, and no doubt will, have them to manage their own affairs."

Finally, it was resolved that, a petition to the following effect should be addressed to the legislature:—

"That your petitioners, duly impressed with the great and acknowledged importance of the medical charities of this country to the industrious poor, which by timely relief of the heads of families tend materially to the prevention of pauperism, and feeling that much of their usefulness must necessarily depend upon the character and competence of these entrusted with their direction and management, earnestly implore your honourable house to place the control of these establishments in the hands of persons possessing alike the respect and confidence of the profession and public; which they do not hesitate to assert the poor-law commissioners do not possess. That while your petitioners rejoice that the legislature has made provision for the extension of vaccination, they cannot avoid expressing their regret that the poor-law commissioners prove their incapacity to administer this law, their rules and regulations having virtually annulled the beneficent intentions of the act.

"That your petitioners humbly express their hope that in any legislation which your honourable house may be disposed to make, regarding the medical charities of this country, that provision will be made to secure the interest of the present medical attendants of these public institutions, with whose arduous duties they have been long connected, and that the system of tender for medical services, which is not only novel in this country, and derogatory to the character and respectability of the profession, as well as injurious to the best interests of society, may be guarded against.

"That your petitioners have every reliance upon the Government, and humbly pray that your honourable house will place the control and management of the medical institutions of this country in the hands of the executive, under such medical supervision as your honourable house may deem necessary, and your petitioners will ever pray."

The respectable and numerous assemblage of medical practitioners at Cork, and the decided tone which they have adopted with respect to the proposed Medical Charities' Bill, cannot fail to produce an effect on the mind of Lord Eliot. Resolutions similar to those discussed at the Cork meeting have, probably, ere this received the sanction of the different medical associations which exist in Ireland. The managing

committees of several dispensaries have also taken up the question, for the Irish gentry have not yet learned to become puppets in the hands of poor-law commissioners; in a word, a spirit of union and determination has been excited in all classes of society against the main feature of this despotic and detestable bill, and we look forward with much confidence to the result of the struggle. The ambition of the commissioners has overleaped itself.

ACADEMY OF SCIENCES, PARIS.

May 9.

CHEMICAL PHENOMENA OF DIGESTION.

From various experiments made by MM. Sandras and Bouchardat, they conclude,—

1. That the digestive function of the stomach consists (as far as albuminous substances are concerned) in dissolving these substances in hydrochloric acid.

2. This acid, diluted to the 500th degree, is sufficient to dissolve the above-mentioned substances, provided they are not in a crude state; when they are boiled, diluted hydrochloric acid is unable to dissolve them in glass vessels; hence, since we find them dissolved in the stomach, something more than a mere process of solution must take place in the stomach; still the presence of hydrochloric acid appears to be indispensable.

3. The digestion and absorption of albuminous matters take place almost exclusively in the stomach.

4. The solution of fecula also seems to be confined to the stomach; in the ordinary state it does not appear to be changed into sugar; nor is it proved that it is transformed into starch; the authors, however, regard its transformation into lactic acid as demonstrated.

5. The absorption of fecula does not appear to be confined to the stomach, as that of albuminous matter is; and this accords with the peculiar arrangement of the stomach in non-carnivorous animals.

6. Fatty substances are not attacked by the stomach; they pass on into the duodenum, where they form a kind of emulsion with the alkalis furnished by the liver and pancreas; this emulsion exists in abundance throughout the intestinal canal.

7. The chyle appeared to be somewhat less abundant in quantity, but identical in properties, when taken from fasting animals, and from those fed on albuminous substances, or fecula. When the animal, however, was fed on fat, it presented a marked difference, the fat being found in considerable proportion in the chyle.

The deductions which the authors draw from the foregoing facts are as follows:—It is generally admitted that alimentary substances are transformed by the stomach into a particular matter, called chyme. The authors think that this chyme is a mixture of alimentary residua which have not been dissolved, with secretions from the intestinal canal, and that it is not a fluid prepared for assimilation. The chyle was regarded as being composed of alimentary matter very minutely divided, or dissolved afresh. But coloured fibrin does not give coloured chyle, and the chyle collected during the digestion of starch is the same as that collected during the digestion of fibrin.

Hence it appears probable that albuminous and feculent substances are not transformed into chyle The experiments of the authors, also, would lead to the conclusion that the orifices of the chyliferous vessels are intended to absorb the fatty substances turned into emulsions by the bile. But the chyle has another office. When palatable substances are presented to an animal, the gastric juice poured out into the stomach contains a remarkable proportion of hydrochloric and lactic acids, evidently furnished by the decomposition of chloride of sodium and lactate of soda; during this time the abdominal glands prepare chyle, the alkaline nature of which predominates in proportion to the acidity of the gastric juice, and the chyle mixes with the blood, so as to neutralise exactly the acid necessary for the solution of alimentary substances.

MOVEMENTS OF THE HEART.

M. Choriol is of opinion that during its systole the heart undergoes a kind of torsion, and of untwisting during the diastole. This he concludes from the fact that when the heart of an animal is exposed, and a long needle stuck in it, the needle describes a segment of a circle during each contraction of the heart; besides, if two fingers be placed over the region of the heart in a thin person, the finger nearer to the sternum perceives the heart's impulse first.

DR. WILLIS

ON THE

TREATMENT OF STONE IN THE BLADDER.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—The extraordinary and unjustifiable attack made by Dr. Willis, in his treatise on Stone in the Bladder, against the operation of lithotrity, renders it necessary that some notice should be taken of his otherwise, in my opinion, insignificant publication. I had hoped that the many inaccuracies and ludicrous deductions contained in it would have been exposed by some more competent person; but, disappointed in this, I have ventured on sending you the following remarks, and would beg for them, if deemed worthy, the favour of insertion in your valuable Journal.

As a writer, Dr. Willis holds a prominent position amongst those who, confounding familiarity with knowledge, vainly imagine that they are enabled, from a superficial acquaintance with the names and writings of their predecessors, to judge of and decide on the comparative merit of their labours. He has taken a passage here and there from various authors, particularly those who have signalised themselves by their opposition to lithotrity, and combined his knowledge, favouring us with the result of his lucubrations in the form of a "little" Treatise on the Medical and Mechanical Treatment of Stone in the Bladder.

My space will not allow me to examine otherwise than briefly, Dr. Willis's "History of Lithotrity."

At p. 69 he says, "France had little or no share in all that led the way to what is now generally esteemed her highest surgical glory—the method of treating stone in the bladder by grinding and crushing," and he supports this assertion by quoting the names of the various English authors who have written on diseases either of the bladder or of the urethra, between the years 1780 and 1820, and then triumphantly exclaiming that, whilst we have in England a dozen or so of books, in France we have but one or two at the utmost!

"In a single volume of the Transactions of the Medical and Chirurgical Society (Vol. II., 1820-21)," exclaims the Doctor, "there are actually as many as seven most interesting papers connected with the treatment of stone in the bladder, and these papers are so remarkable, and bear so essentially on my position, that in England did the fecund germs (!) of lithotrity take shape, that I give their titles at length below;" and, in good sooth, there we have them at full length at p. 36. I have carefully examined not only the *titles*, but also the contents of these seven wonderful papers, and although I admit that they are most creditable productions, and of great practical importance, I am at a loss to perceive what possible connection there is between them and the invention of a method by which an instrument is passed through the urethra into the bladder, and the stone seized and broken; and I would certainly beg to ask what influence the publication of a "Statistical Enquiry into the Frequency of Stone in the Bladder in Great Britain and Ireland," of some cases of lithotomy, in which the stones, too large for extracting, were broken somewhat according to Celsus' plan; and of two papers on lithotomy, by Earle and Martineau, what influence these seven papers could have had on the invention of lithotrity?

"The first broad annunciation we possess in these times of the principles of lithotrity, was the appearance, in 1819, of Elderton's paper and instrument." In this I partly agree with the learned Doctor. To Elderton great merit is due. He was the first in England to propose an instrument by which the stone could be seized and held fast, whilst attempts were made to reduce its size by means of a rasp moved by the fingers; but so inapplicable was his invention considered by all surgeons, especially in France, that it was called not only absurd, but even "monstrous." Six years before him, however, in 1813, Gruithuisen had described a canula containing a small trepan to perforate the stone, and a noose of wire to fix it before operating; but Gruithuisen directed his attention principally to the possibility of dissolving urinary calculi by lithontriptics, and his instrument was more for the purpose of ascertaining their nature than for their mechanical destruction.

"But the most important step of all in the history of lithotrity," says Dr. Willis, "was the publication, in 1819-21, of Arnott's Treatise on Strictures of the Urethra, and Cases." Yet, notwithstanding this assertion, he admits, a few lines further on, that "in those works allusion was only made incidentally to a mode of ascertaining the nature of the calculus, by means of an open-pointed catheter, through which a small circular saw, like a trephine, might be introduced to grate off a sufficient quantity of dust for examination;" and still further on, that Arnott, on speaking of removal of stone by mechanical attrition, and "hinting that better instruments might be constructed than any which had as yet been proposed for the purpose of breaking of the stone," expresses himself adverse to the idea, and even goes so far as to say, that from the tediousness of the operation, and the necessity of great manual dexterity and ingenuity, "it is scarcely probable that the thing will be again attempted." (p. 70.)

But, says the good Doctor, "I have not yet done with Mr. James Arnott." "In the course of my researches for information, I was struck by the essential similarity of the ideas and means of cure proposed by Arnott in his treatise (1819), and by Ducamp in his *Traité des Retentions d'Urine* (1823)," and p. 74, "I was still further struck by observing Ducamp's name frequently mentioned by M. Leroy in his *Exposé de diverses procédés*, &c.," and, p. 75, "My astonishment was increased when I saw that M. Leroy's ideas, so naïvely narrated as his own, were essentially the same as those of Arnott." "But my amazement at this summary of views and means subsided in a very considerable degree, when I chanced to turn to a work, published in 1825 by Nicod, wherein I found it stated, that his researches on the urinary passages had given Ducamp the idea of an instrument intended to destroy calculi within the bladder without having recourse to lithotomy, which instrument served subsequently as the model of that of M. Leroy, in taking advantage of which M. Civiale showed such address."

It is evident from all this, according to Dr. Willis, that, first, Arnott published his treatise in 1819; second, Ducamp came in 1823, and cribbed Arnott's ideas and instruments, perfecting them; and thirdly, that Ducamp was followed by M. Leroy, who, in his turn, cribbed Ducamp's, *alias* Arnott's, instruments, and this, horrid man, without even mentioning his deceased friend Ducamp as having invented an instrument for breaking stone in the bladder.

It is curious to remark that Dr. Willis begins by telling us that Ducamp had an idea, and finishes by saying that he invented an instrument. Why, hundreds of surgeons have had ideas, but have never been able to bring them forth. But, even admitting that Ducamp had invented an instrument—taking the idea from Arnott—what, in the name of common sense, would it prove? Had not Gruithuisen, in 1813, described and figured a canula through which a noose of wire was passed to secure the stone, and a small trepan to perforate it? and what was Arnott's instrument but a mere copy of this?

No! if Dr. Willis had not been blinded by his patriotic zeal, he would have seen that the various instruments, recommended by Gruithuisen, Elderton, Arnott, and Ducamp, tended no more to the advancement of lithotrity as an operation, than the futile and disjointed operations performed by Albucasis, the monk of Citaux, Colonel Martin, and a dozen others, in various countries and at different periods. Unlike to all other great surgical operations, lithotrity was not the result of learning or deep research; there was no gradual development or improvement. It sprung from the re-establishment of a neglected anatomical fact, the possibility of passing straight instruments through

the male urethra, and from a proper acquaintance with the surgical anatomy of the urethra and bladder. For these we are indebted to a Frenchman, M. Amussat, who, in 1822, published his "*Note sur la possibilité de sonder l'urethre de l'homme avec une sonde tout à fait droite.*"

It is from this period, 1822, that the true history of lithotrity commences, let its "fecund germs have taken shape" in whatever country Dr. Willis pleases. What France glories so much and so justly in, is, in having formed a new method of operating, established the rules for its performance, and applied it to the removal of an affection that, before 1822, required for its relief a painful and dangerous operation.

"Our instruments are perfect; in the vast majority of cases no difficulty is experienced in seizing and reducing to pieces even large calculi (I thank the Doctor for granting this); but has this object, so eagerly pursued, so completely obtained, answered the expectations even as dearly cherished (!) of its being extensively useful to humanity? I answer, unhesitatingly, *No.*" (p. 94.)

Perhaps few surgical operations have met with such opposition as lithotrity. The introduction of a large straight instrument through the urethra into the bladder, appeared almost "satanical." By some surgeons it was styled "villanous and dangerous," by others it was considered more tedious, painful, and fatal than lithotomy; and, notwithstanding the continued publication of successful cures by it, lithotrity was received by the majority of surgeons with dislike and distrust.

In 1835 a grand debate, from which lithotrity rose triumphant, took place in the Royal Academy of Medicine of Paris, between the partisans and opponents of this operation. Amongst the latter M. Velpeau was most conspicuous, and it is from this gentlemen's speeches and writings that Dr. Willis has culled all his arguments.

The very same answers, as were made in 1835 to M. Velpeau, apply with equal force to Dr. Willis. Every argument, every objection, every fatal case, that could be brought to bear against lithotrity, has been diligently noted; but he has carefully, most carefully, avoided mentioning one single thing that is admitted, even by its fiercest opponents, as favourable to the operation—and why so? Because Dr. Willis, having a set plan to advance, wishes to prove, what others have vainly attempted to do, that lithotrity is a "desperate operation."

But "the statistics of the plan prove as much," says Dr. Willis, and in proof thereof he lays before us a statement of the results of the different operations performed by M. Civiale at the hospital, Necker. It were useless, and indeed impossible in the pages of a periodical, to discuss this question "toties vexata;" but even admitting, which I am far from doing, the justness of the conclusion at which Dr. Willis, in imitation of M. Velpeau, whom he has here copied nearly word for word, has aimed at, respecting M. Civiale's cases, what would it prove? Lithotrity, as it is performed in the present day, is no longer the same as that to which M. Civiale's patients were first submitted. Is it, therefore, just or fair to decide on the merit of an operation from the results of a discarded and objectionable method of performance? What would be said of a writer of the present day who should come forward and attempt to prove that we are wrong in asserting that the results of our amputations are as favourable as we imagine, and, in support, ransack all the ancient authors, from the time of Celsus and the cauterising-iron, and adding up the number of operations and deaths, exclaim, "here are my statistics—instead of one death out of six or so of patients operated on, as you pretend to, my *statistics* prove that not one patient out of a dozen recovers!" Yet such has been the plan followed by all the opponents to lithotrity, and, amongst them, by Dr. Willis. As was truly remarked by M. Amussat, in 1835, "they take all the operations performed from the very birth of lithotrity, and draw from them unfair conclusions." Dr. Willis admits that "the general adoption of Baron Heurteloup's method of crushing, has decided on the comparative merit of the two operations, by crushing and drilling." And still, with one or two exceptions, all his objections to lithotrity are derived from cases operated on by the last method.

Has lithotrity remained stationary from the time of its discovery? Has there been no improvement in the instruments and their application in our knowledge of the cases that are favourable or unfavourable to the operation? These no one can deny, and yet Dr. Willis speaks, in 1842, of lithotrity such as it was in 1830. If, in the course of his researches for information, instead of hunting up old and forgotten arguments, he had turned to the medical journals, he would have seen that, day by day, lithotrity has advanced; that, as it became more fully understood, its application became easier and safer, and that its successes were necessarily greater; notwithstanding all these facts, incontrovertible facts, staring him full in the face, Dr. Willis dares to ask whether "M. Civiale's first successes ought not rather to be made a subject of regret than of rejoicing?" (p. 94.)

Why, may I ask Dr. Willis, when he mentions (p. 113) Mr. Key as having shown clearly "that lithotrity is an operation which is neither so universally successful, nor so extensively applicable, as might be inferred from the statement of its professors?"—why has he contented himself, with an unfairness I need not qualify, with simply "considering it his duty to lay in abstract before his readers" the particulars of twelve cases unfavourable to lithotrity? Why has he not continued his extracts, and "laid before his readers" the following passages from Mr. Key's paper?—"From the time of Baron Heurteloup's invention I began to study lithotrity, in the hopes that it might be made available to the general surgeon as an occasional substitute for the knife. My expectations have been fully realised; since commencing the practice of lithotrity, I found that *more than half the number of adults*, who came under my care, *have been fit subjects for the operation*, and that *in the majority* of persons afflicted with calculus it has *decided advantages over lithotomy.*" And further on, "one among the principal advantages which lithotrity has conferred upon surgery is the early application which patients are induced to make for the relief of their disorder—by this early application in *three persons out of four*, who apply for advice for symptoms of calculi, the size of the stone and the condition of the viscus *render lithotrity an easy and safe operation.*" Here we have

a splendid confirmation of what M. Lisfranc, in 1835, advanced in favour of lithotrity. "That as lithotrity became more popular, patients, who were deterred from fear of lithotomy, would consult the surgeon at an earlier period of the disease, and that the number of large calculi would necessarily diminish, increasing thus the chances of lithotrity being more generally applied."

It were an endless task to notice all the ridiculous passages in Dr. Willis's book; but the following are so rich that I cannot pass them over in silence. Thus, p. 117, "Lithotrity is not only a dangerous operation in itself; it very generally puts the sufferer beyond the pale of relief by other immediate means, particularly (!) lithotomy; of this we have ample assurance in the cases that presented themselves in the practice of M. Souberbielle." I would simply beg to refer your readers to M. Souberbielle's memoirs, and to the report made on them by M. Sanson, one of the greatest opponents to lithotrity. He will there find it stated, in plain letters, that out of twelve patients, operated on by M. Souberbielle, after attempts had been made to destroy the calculi by lithotrity, *ten recovered!* Also, p. 123, "Lithotrity is admissible where it is certain that the stone can at one sitting be seized and reduced to fragments of sufficient minuteness to pass by the urethra. No second, certainly no third operation, ought ever to be contemplated. If the patient, who has had lithotrity performed upon him, is not relieved at once, he is in imminent danger of losing his life!!" And this in italics, too, from fear of misapprehension! The very absurdity of the thing is too evident to require comment.

It is truly lamentable to witness the extent to which some men allow themselves to be carried by their insufferable self-esteem. Dr. Willis, ignorant, as every line in his chapter on lithotrity proves, of every thing connected with lithotrity, never having performed it, never, as is probable, having even seen it performed, has taken upon himself to decide on its merits, and to stamp with his reprobation, forsooth, an operation, the value of which has been admitted by surgeons of the greatest eminence, and which becomes daily greater. Not content, however, with thus dogmatically laying down the law, he has had the hardihood (p. 109) to charge men, honoured in their own country, and respected by their countrymen for their talents and learning, with "mendacity and pretence." If our indignation at this slander were not somewhat modified by the ludicrousness of such a charge coming from such a quarter, we would venture to read Dr. Willis a lesson that he would not easily forget. But "nescit vox missa reverti." It stands as a record of what ignorance and pretence can produce.

I had wished, also, to offer a few remarks on Dr. Willis's chapters on lithotomy and lithotrity; but as I find that my letter is already much longer than I had intended, I must reserve them for some future period.

I have the honour to be, Gentlemen,

Yours obediently,

W. C.

Paris, May, 1842.

IDENTITY
OF
SMALL-POX AND COW-POCK.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—Having, within the last few days past, received from Professor Heim, a copy of his paper "Der Versuch Menschenpockenstoff auf Kühe zur Erzeugung der Vaccine zur übertragen, *gelung zuerst* auf *Deutschen Boden* schon im Jahre, 1801," which he is desirous I should make known in England, and which I doubt not will prove interesting to your readers, I take the earliest opportunity of forwarding it to you for that purpose. At the same time I beg leave to remark, that it was at my suggestion and request that Dr. Heim sought for some of the materials of this historical notice.

Soon after I first had the honour and advantage of corresponding with this able and indefatigable author —about two years ago—I intimated to him the great desire I had to obtain further information, and more explicit details, of Gassner's experiments in variolating the cow, for which I had already sought in vain both here and in Germany. I thought there was some error in the only statement of Gassner's experiments which I could procure, in the "Saltzburgh Medical Journal," as regarded the *numbers* said to have been successfully variolated. In No. 67 of that journal it is stated, "That Gassner had inoculated several cows with small-pox matter, and that *eleven* had got cow-pox." Knowing the difficulty I had encountered in my experiments, I felt anxious to ascertain the correctness of this statement, and, if correct, to learn the cause of such inconceivable success.

With his characteristic energy and zeal, Dr. Heim has succeeded in furnishing us with very satisfactory intelligence relative to this, the first successful variolation of the cow. The publication of the correction of that statement of Dr. Gassner's experiment, by so careful and discreet a hand, will assuredly rescue it from that doubt and uncertainty in which it had so long and so undeservedly lain.

In conclusion, allow me to add that I rejoice to find that Dr. Gassner lived long enough to have the statement of his experiments rectified, and their results confirmed. "*Palmam qui meruit, ferat.*"

I am, Gentlemen,

Yours very faithfully,

Robert Ceely.

Aylesbury, May 17, 1842.

Abstract of Professor Heim's Paper.

The first notice of Dr. Gassner's experiments is to be found in No. 67 of the "Salzburgher Medic. Zeitg., 1807, in the following terms:—

"*Günzburg.*—Dr. Gassner has inoculated several cows with small-pox lymph, and eleven of the cows have taken the cow-pock. With the matter thus obtained, four children of a curate were vaccinated, and very fine cow-pock ensued." In the year 1807, an inquiry was held by order of the Minister of the Interior on the announcement just alluded to. Dr. Gassner himself was examined, and declared that, in May, 1801, he had made the experiments mentioned. No

effect was produced on ten cows; the eleventh he inoculated with the most perfect success. He described the progress of the disease as follows :—On the second, third, and fourth days, nothing was observed in the points where the matter had been introduced; on the fifth day, however, a small red point formed over each; on the sixth, a small transparent vesicle; on the seventh, the vesicle was converted into a bulla *(blase)*, which was surrounded with a reddish circle on the eighth and ninth days; on the tenth day, the whole of the bulla was of a bluish pearl colour, and the lymph was, on this day, taken from it. On the eleventh, the udder was swollen, febrile symptoms set in and continued to the twelfth, when the tumefaction of the udder abated; the pustule was now of a whitish colour. On the thirteenth, the animal began to eat, and there was a depression in the middle of the pustule, which turned into a yellow crust on the fourteenth. From the fifteenth to the sixteenth, the crust became brown, then darker, and remained on to the twenty-eighth day.

Dr. Gassner vaccinated with the lymph several children in the rectory-house at Riedheim, and from them, seventeen others at Schönenberg. The appearances of the pock were perfect.

These circumstances were examined into by the commission of inquiry, who came to the conclusion that the facts averred by Dr. Gassner were a pure fiction.

On the other hand, Professor Heim inquired minutely into all the circumstances of the case, and says he is convinced of the variolation of the cow, and of the transmission from her of a disease similar to vaccinia.

In addition to the evidence collected from the surviving children of the curate, vaccinated by Dr. Gassner, of a contemporary witness, the schoolmaster Nübling, Professor Heim cites a letter addressed by Dr. Gassner to Dr. V. Ehrhart, and published in his "Sammlung von Beobactungen, 1. B 1. H Nürnberg, 1803, s. 94." The following is an extract from this letter :—"I have endeavoured to ascertain by experiment the nature of the vaccine lymph. The report that I have inoculated several cows with small-pox is true; the result on the eleventh cow was perfect, and fully bore out the ideas which I had formed from analogy; I vaccinated with the lymph obtained from this cow the four children of a curate at Riedheim, and a beautiful cow-pock was produced. The matter with which I succeeded in producing the disease in the cow was taken from a child labouring under malignant small-pox at Zügen." The letter bears date, Günzberg, April 26, 1802.

UTERINE HYDATIDS SIMULATING PREGNANCY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I have now been practising midwifery for nearly half a century, and never having met with a similar case to the one I now send you, perhaps you will deem it worthy a place in your Journal.

Your obedient servant,

Thomas Pope, Surgeon.

Cleobury Mortimer, Salop,
May 7, 1842.

On Thursday evening, the 21st ult., Jane, the wife of William Perkins, stone-mason, of this town, aged about 35, and mother of six children now living, with difficulty came to my house for advice. On inquiry, I found that in December last she thought herself pregnant, as her usual time of menstruating had just passed by; on the 14th of January last, severe uterine hæmorrhage took place, which continued uninterruptedly, attended with uterine pain and gradual enlargement of the hypogastric region, up to the time she came to me. She was greatly emaciated; pulse quick and weak; with thirst and anorexia. I agreed with her as to the fact of pregnancy; told her that I thought the placenta was near the cervix uteri, and that she ought to have had assistance earlier, and that nothing but the removal of the contents of the uterus would give her the least chance of recovery; I also blamed her for not applying sooner. She said that her husband had been out of work during the greater part of the winter, and that she had not the means of properly supporting her family. I desired her to go home, to confine herself to bed; ordered her diet and medicine suitable for hæmorrhage, and promised to see her in the morning.

On Friday morning she thought herself better; however, I examined the state of the uterus, per vaginam, and found the os uteri only sufficiently dilated to admit a finger, but with some force, I introduced the middle finger also, and dilated them as much as I could for two or three minutes. I saw her three or four times during the day; she had little loss of blood, and something like labour pains at night, when I examined again, and found things in the same state. I ordered her husband to call me if she got worse during the night.

On Saturday morning I found she had passed a restless night, with considerable labour pains, and was much reduced in strength, with a scarcely perceptible pulse, though no hæmorrhage had ensued. On examination, there was no trace of os or cervix uteri, but the whole uterus seemed quite patulous with something of a peculiar and soft feel; no fœtus or placenta could be discovered; I grasped a handful of something, and brought away what proved to be hydatids, varying in size from a pin's head to that of a hen's egg, and of an amber colour; I emptied the uterus of at least five or six quarts of these hydatids, which adhered to every part of the uterus, and also to each other. At their point of union with the uterus there appeared to be a net-work with a thin and soft substance, similar to linen, forming the threads of the net. The uterus appeared to be very thin, and was very sensitive. After the lapse of thirty or forty minutes, I examined and found the uterus much contracted, the cervix formed, and the os tincæ collapsed. I gave the patient an opiate, which procured sleep, but she gradually sank, and died early on Monday morning. I did all I could to obtain an examination of the body, but in vain. Much may be said on this interesting subject. Had the scanty and impoverished diet of the patient anything to do with the production of the hydatids? From her sallow and jaundiced appearance, with the clay, black, and green-coloured stools, and constantly bitter taste in the mouth for some months, is it not probable that they also existed in the liver?

RETROSPECT OF THE MEDICAL SCIENCES.

NUTRITION OF NON-VASCULAR ANIMAL TISSUES.

The organised tissues, constituting non-vascular organs, are, articular cartilage, the cartilage of the different classes of fibro-cartilage, the cornea, the crystalline lens, the vitreous humour, and the epidermoid appendages, viz., the epithelium, the epidermis, nails and claws, hoofs, hair and bristles, feathers, horn and teeth. Into none of these have anatomists ever been able to trace blood-vessels in a state of health. Their presence may be regarded as an indication of disease. Mr. Toynbee states that his injections prove that the vessels which previous anatomists had not traced further than their circumference (supposing them to be continued into these tissues, either as serous vessels, or as red blood-vessels too minute for injection), actually terminate in veins, without the limits of these tissues. The terminations of these vessels in the immediate vicinity of the non-vascular tissues present certain convolutions, dilatations, plexuses, and other peculiarities, which differ in various parts, but in all instances enable a large quantity of blood to circulate slowly in the neighbourhood of these tissues, from which it may be inferred that they are subservient to their nutrition. All the non-vascular tissues contain a larger or smaller number of corpuscles or cells, to which, agreeing therein with Schleiden and Schwann, Mr. Toynbee attributes the function of circulating and perhaps changing the nature of the nutrient fluid, which is brought to the circumference of the solid non-vascular tissues, thus in a manner compensating for the absence of the internal vascularity possessed by other structures. He says, the only difference which appears to exist between the mode of nutrition in the vascular and the non-vascular animal tissues is, that the former derive their nutrient fluid from the blood which circulates through the capillaries contained in their substance; and that the latter are penetrated by the nutrient fluid which exudes from the large vessels by which they are surrounded, and that its distribution through them is assisted by the vital properties of the corpuscles which they contain; in *both classes* the particles of which the tissues are composed attract from this fluid the elements which nourish them. The corpuscles or cells are modifications of two principal forms, the one being either round or oval, the other compressed in the form of a scale; and their existence in one of these two forms has lately been detected in most organs of the body. In a circular form they appear to be the principal components of bone, cartilage, muscular and nervous fibre, and of the parenchyma of glands; in the form of a flattened cell or scale they constitute the epidermis and its appendages, the epithelium of mucous and serous membranes, and of the inner tunic of the vascular system.—*Philosophical Transactions.*

EMETICS IN CROUP.

A communication published in the "Gazette Médicale," written by M. Marrotte, contains the details of three cases of croup, which were cured by the application of leeches, and the repeated employment of emetics. The first of these cases is of exceeding interest, inasmuch, for several days after the commencement of the attack, as the child improved, the use of the emetic was intermitted, each intermission being followed by a relapse of the disease, clearly showing the advantage of the treatment. The sulphate of zinc, tartarised antimony, impure emetine, and syrup of ipecacuanha, were the emetics employed. Emetics are prompt and energetic in their action; like the disease they are intended to overcome, they produce a powerful revulsion, and induce a favourable disturbance of the nervous system, by the state of syncope and malaise which is the consequence of their use, a state analogous to that produced by bleeding; but they have this advantage over the latter—they constitute not only a most energetic sedative, but they can be employed again and again; besides which, emetics possess the important property of breaking and expelling mechanically the false membranes, which constitute a material obstacle to respiration.

STATISTICS OF ILLEGITIMACY.

The proportions for the five years commencing 1824, and terminating 1828, both years inclusive, give one illegitimate birth to 13.85 total births; one child abandoned to 29.71 total births; and one child abandoned to 2.15 illegitimate births. For the next five years, terminating 1833, the proportions are, one illegitimate child to 13.83 total births; one child abandoned to 28.22 total births; and one child abandoned to 2.04 illegitimate births. Since the year 1816, the number of illegitimate births has continued nearly stationary at one in 14, or 7 per cent.; while the increased number of marriages, with the smaller proportion of children to each, and the diminished mortality, points to an improved moral, as well as physical, condition of the population. The general law of increase in the desertions of new-born infants is the augmentation of the population. When the population becomes more considerable, the hospices receive a larger number of foundlings; when it diminishes, the number of desertions immediately undergoes a perceptible reduction. Poverty has much more to do with the abandoning of children a few years old, than with the desertion of new-born infants.—*British and Foreign Medical Review.*

COLD LOTIONS IN CROUP.

Dr. Moos, of Vienna, was in attendance on a child, four years old, labouring under croup. He leeched the throat, gave calomel every hour, and finally adopted the emetic system, but without improvement. The disease continued to increase, and in thirty-six hours the little patient was so dangerously ill, it was determined to perform the operation of tracheotomy. While the necessary preparations were making for this operation, cold lotions were applied to the head and neck, renewed every three minutes, and the child was made to drink cold water. Three hours afterwards it was calmer, the respiration less difficult, the cough more rare, the croupy sound less acute, and less danger of suffocation. The same treatment was persisted in, and cold affusions practised every half hour for two minutes at a time. In fifteen hours the patient was out of danger, and all the symptoms, except a slight hoarseness, had disappeared by the fifth day.—*Oesterr. Med. Wochenschrift.*

ENCEPHALOID TUMOUR.

M. Jelapi was consulted by a woman, forty-six years old, having a scirrhous tumour in her left breast as large as a good sized apple. He advised its extirpation, which she refused to consent to, and he saw no more of her for a year, when he was again sent for. The tumour was then as large as a man's head, and there were points of ulceration on its surface, whence was discharged an acrid, corrosive, fetid liquid. The patient was confined to her bed by almost constant accessions of fever. Nevertheless, the tumour being perfectly mobile, no swelling under the arm-pit, and the viscera generally healthy, an operation was decided on, and agreed to by the patient, as the only chance for life. Dr. Melito operated, and the tumour, when removed, weighed 4 kilogrammes 750 grammes. The tumour consisted of an external layer of lardaceous tissue, and internally of encephaloid matter. The operation was perfectly successful, and at the date of the report, three years and a half after the operation, there were not any signs of relapse. The patient was directed to take the dulcamara and the fumitory for some time after the operation. The important fact in this case is the permanent cure, of for at least three years and a half, of a cancerous tumour, ulcerated when its extirpation took place.—*Il Filiatre Sebezio.*

CONGENITAL UNUNITED FRACTURE.

A boy, ten years of age, was admitted into the hospital la Pitié, under the care of Lisfranc, having from birth an ununited fracture of both bones of the right leg in the lower third, as also a contracted tendo Achillis, the leg being, as it were, turned back upon itself, so that he could not walk without crutches. The first step taken by Lisfranc was the division of the tendo Achillis, after which he succeeded in slowly lengthening the muscles by repeated traction with orthopedic apparatus, so as to bring the broken portions of bone in apposition. Further proceeding, he thought, was contraindicated by the weak, lymphatic appearance of the child, which could not support the operation requisite to cause union between the broken bones. Under these circumstances, Lisfranc had an apparatus made by M. Absil, surgical mechanician, composed of pieces of metal and leather straps, which, having its point d'appui on the pelvis, should support the bones and keep them in contact, and thus enable the boy to walk perfectly and without support, as if the bones had not been broken.—*Bullétin Général de Thérapeutique.*

RECAMIER'S BANDAGE FOR FRACTURED CLAVICLE.

M. Recamier employs the following apparatus for the fractured clavicle, by which he obtains a fixed point d'appui on the spinal column, instead of the movable one of the elbow or the thorax. The bandage consists of a square cushion completely distended with hay, so as to make a considerable projection, which he places between the two shoulders; to either side of this cushion a handkerchief, folded cravat-shape, is fixed, the other end being carried over the shoulder, under the arm-pits, crossed over the back, and then tied on the chest. Before they are fastened together the shoulders must be carefully carried back by an assistant. The patient is in no way inconvenienced by this bandage, which keeps the fracture reduced, whether lying or standing. The cushion appears, however, like a hump on his back. He must carry the arm in a sling.—*Ibid.*

ACCUMULATION OF FÆCES IN RUPTURES.

Boyer has asserted that there is almost always an accumulation of fæces in old herniæ, but this is contradicted by facts. I sought for this pretended collection of fæces under circumstances the most favourable for its production; I examined the oldest and most voluminous herniæ in Bicêtre, herniæ of from twenty-two to thirty centimetres high, from forty-six to sixty-four centimetres in circumference, and being from fourteen to thirty years' duration. On the living subject, percussion gave a very clear sound throughout nearly the entire extent of these herniæ; the digestion was not difficult, and the stools were regular; in short, there was not anything to lead to the supposition that there was either accumulation or even a mere arrest of the fæces. On the dead body, these immense herniæ were most frequently found to consist entirely of the small intestines, in which a collection of fæces is quite out of the question; but even where one or two portions of the larger intestines were included in the protrusion, they were either empty, or contained much less matter than the other portion remaining in the abdomen.—*M. Becquerel.*

OTITIS AND OTORRHŒA.

A singular and interesting case of otitis, followed by otorrhœa, and complicated with abscesses, is recorded in the "Bulletin Général de Thérapeutique" for February. It occurred in the person of an aged man, who had been chef de bataillon under Napoleon. He was attacked with pleuro-pneumonia of the left side, at the same time that he suffered from otitis of the left ear. The antiphlogistic treatment removed the pneumonia, but the inflammation of the ear increased, and in spite of local antiphlogistics (general bleedings could not be practised, in consequence of the severity of the treatment for the pneumonia), an abundant sero-purulent discharge took place from the meatus. From this state the patient gradually improved during the two following months, the pain, discharge, &c., diminishing, so as at length to be scarcely perceptible. Shortly afterwards, in consequence of an imprudent exposure to cold, the symptoms returned; the discharge again became abundant and sero-purulent, the soft parts near the mastoid process were swollen and œdematous, but without pain, and a deep-seated abscess formed in the lower half of the side of the neck, which, when opened, was found to be connected with the meatus auditorius, although the point of communication could not be discovered. Free incisions made in the lower part of the abscess, allowing a perfect passage for the discharge, were found to be of great service, very little secretion being afterwards furnished by the meatus. The sub-acute inflammation of the parts around the mastoid process still continued, and the skin was thin, shining, and of a deep erysipelatous colour; and this state was followed a few days after by the formation of an abscess on the squamous portion of the temporal bone, which emptied itself by the meatus auditorius. When the unfortunate patient was relieved from this he was again subjected to an attack of inflammation in that part of the neck which had been the seat of the previous abscess, the ulcer deepening, assuming an unhealthy character, and its edges, together with the vicinal integuments,

becoming red and painful, so as not to bear the slightest touch. The otorrhœa had entirely ceased. The parts beneath were red and swollen, and the lower extremity of the sterno-cleido-mastoideus was hard and thickened, but free from pain. Topical emollients and demulcents slowly restored the parts to a healthy state, and cicatrisation gradually took place without any return of inflammation.

LITHOTOMY.

The success in lithotomy is not so great under any circumstances, certainly not in those where success is most truly desirable, as should induce men of humanity to rest satisfied with its results. A mortality of one in three, and one in four, is a frightful mortality; and after forty, when the life of man is most truly precious, when he is the husband and the father, the mainstring in the varied business of the world, the mortality is certainly not less. Were the success nineteen in twenty, it would still be worth while, in my opinion, to strive to make it twenty in twenty-one.—*Willis on Stone in the Bladder.*

CHLORURET OF TIN.

Dr. Nauche has employed the chloruret of tin internally and externally in cases of glandular enlargements, scirrhous tumours, and even cancerous ulcerations, with advantage. The formulæ he uses are as follows:—Take one fourth of a grain of the chloruret of tin, one pint of distilled water; dissolve it, and give a tablespoonful daily in a glassful of gum water. He occasionally uses this solution as a lotion for cancerous sores. The ointment is made with from one to two grains of the chloruret, carefully mixed with ten drachms of lead. This quantity is divided into eight doses, one of which is rubbed in daily on the inside of the legs or thighs.—*Gazette des Hôpitaux.*

DERANGEMENT OF THE PRIMÆ VIÆ.

When the motions are ill-coloured or foul, it is in this country always inferred that the liver is out of order, sluggish, or congested, or something else, and recourse is had to the grand nostrum of quack-salvery. You may rely on it that this is very much a crotchet of British practice, a sort of insular superstition. Mercury is no more a panacea in these alleged hepatic disorders than in any other; many medicines promote the evacuation of yellow, &c. fæces, which is the admitted and only test of the presence of bile that is always available; for example, croton and castor oils, aloes, iodide of potass, rhubarb, &c. I do not object to the use of mercury in such cases, but to the exclusive reliance on the metal, and that hankering after grey powder and other mercurials that infest the British nursery. Foul discharges arise from irritation of the mucous membrane, more than of any other tissue or organ, and over such irritation the fondest mercurialist will admit that his favourite remedy has no peculiar power.—*Dr. Clendinning, Lancet.*

SECTION OF SACRO-ISCHIATIC LIGAMENTS.

Dr. Frantz has placed a case of narrowness of the lower outlet of the pelvis on record, in which he divided the sacro-ischiatic ligament on either side. His patient was a weakly woman, thirty-five years of age, subject to œdema, and the occasion was her third accouchement, she not having gone her full time in the first and second pregnancy. When he was sent for, the waters had come away, and he found it was a breech presentation, the nates having already entered the cavity of the pelvis. The labour was natural, except that the lower outlet was reduced to a diameter of two inches and a quarter transversely, and two inches and a half from before backwards, by the tension of the sacro-ischiatic ligaments. As it was impossible to apply either the blunt hook or the forceps, no other resource seemed left than embryotomy or the Cæsarean section. Under these circumstances, Dr. Frantz decided on dividing the sacro-ischiatic ligaments, which he effected with the tenotome of Strohmeyer, the midwife drawing the rectum out of the way. The blunt hook was then applied, and the child was easily born. Very little hæmorrhage followed; a smart fever and diarrhœa followed, the result of a fit of indigestion on the fifth day; a small recto-vaginal fistula formed, which gradually diminished, so as scarcely to allow, at the end of a few weeks, of the passage of a few drops of liquid fæces when the patient had diarrhœa.—*Journal de Chirurgie.*

ABSCESS OF THE ILIAC FOSSA.

M. Barthélemy recommends in cases of extra-peritoneal abscess of the iliac fossa, the careful and repeated examination of the lumbar region, in order that, if positive indications of the collection of pus can be discovered there, an opening may be made, rather than allow the matter to make its way into the pelvis, where its presence may cause death. He adds, that the opening of abscesses there, is neither difficult nor dangerous, inasmuch as the abscess itself interposes between the abdominal parietes and the peritoneum. After the operation, the patient should be kept lying on his back, and a tent be passed into the opening, to be replaced the next day by emollient injections.—*Annales de Chirurgie.*

INSANITY.

Insanity is not a state separated by a broad line from sound mind. Every gradation is observable; and we perceive morbid action before we can venture to say that the patient is insane. Some are cured at home of mental affections in a few weeks, who, if sent to an asylum, would become mad, and remain so for months or years.—*Dr. Combe, Phrenological Journal.*

MONOMANIA.

Monomania, religious, erotic, and other manias, are not different diseases. One organ and faculty being chiefly affected, and the rest entire, gives rise to monomania; but the proximate cause may be, and often is, the same as where all the organs and faculties are affected. Religious despondency is the mere symptom also, and appears, because the function of some cerebral parts is to manifest religious feelings, and these being diseased, the function necessarily suffers, and the feeling is altered. But the *same* pathological state affecting combativeness and destructiveness would produce furious mania.—*Ibid.*

AMAUROSIS CURED BY THE OPERATION FOR CATARACT.

M. Serre, of Montpellier, has narrated three cases in which individuals had been operated on for cataract in one eye, and, after having had vision restored, had lost it, the pupil remaining clear, the eye apparently amaurotic. In each of these cases the other eye was

affected with cataract, and the performance of the operation was in each case followed by the restoration of sight in both eyes. M. Serre attributes the improvement of the amaurotic eye to sympathy, from the sudden and powerful perception of light by the eye recently operated on.—*Gazette Médicale.*

STRANGULATION OF THE PENIS BY A RING.

A boy, having passed his penis through a steel ring, the organ soon became so swollen and inflamed that it could not be withdrawn. The following plan was adopted for its removal, under medical superintendence, with perfect success:—A very strong thread was passed beneath the ring by means of a curved blunt needle; the end that was nearest to the pubes being held firmly with the left hand, the other portion was twisted tighly round the glandular portion of the organ, so as to exercise a degree of constriction on it. The thread was then gradually unrolled, commencing with the end held in the left hand, and by this process the ring was steadily withdrawn on the spirals of the thread, as on a screw. The same plan might be adopted with respect to rings on hydropic and gouty fingers.—*Ibid.*

LEUCORRHŒA IN CHILDREN.

This complaint may arise from two very different causes, the one, an internal cause, depends on the influence of a weak, lymphatic, or even scrofulous or rachitic constitution, and is far from uncommon among the children of the lower orders. This kind of inflammation of the vulva may proceed to gangrene. The second cause is the result of a direct mechanical irritation, such as onanism, and attempts at precocious copulation, more or less imperfectly accomplished. The discharge in these last-named cases may be gonorrhœal or syphilitic. The diagnosis of the cause is not unfrequently exceedingly difficult, but the practitioner will derive assistance in forming an opinion, by noting whether there be present on the external parts of generation any ecchymoses, lacerations, or excoriations; whether the vulva is dilated and driven in, as it were, the hymen ruptured, or prolapsion of the urethra present. Under these circumstances there is presumptive evidence of an attempt at violation; the evidence is, however, only presumptive, not positive, for the girl may have produced these appearances herself by practising masturbation. If the discharge, then, is not accompanied by any syphilitic symptoms, we cannot conclude positively that attempts at violation have been made. Whenever, however, the child has chancres in addition to the leucorrhœa, the case is scarcely doubtful. It is important to distinguish the chancre from the ulcerations which follow the separation of sloughs, the chancre being an evident characteristic of syphilis, and capable of direct transmission. The constitutional appearances must be taken as a guide in forming a diagnosis. Where rachitic or strumous characters are plainly marked, a sufficient cause for the discharge will be found, without attributing it to impure connection. The results of the treatment will be of still more service, for the leucorrhœa of constitutional origin cannot be cured by local remedies. The preparations of bark, the bitters, iron, and iodine, with gelatinous, salt, or sulphurous baths, and good diet are requisite in addition to the use of topical measures.—*Guersant, fils, Gazette des Hôpitaux.*

OBLIQUITY OF THE NOSE.

M. Dieffenbach has recently applied in two cases the principles of the subcutaneous incision to a new operation, for remedying the deformity caused by an obliquity of the nose. In both cases the nose was, as it were, thrown outwards, and upon the cheek, one nostril being turned upwards, the other downwards. In one case it was congenital, in the other it was caused by a blow. The operator inserted a narrow bistoury under the skin of the bridge, dividing the union of the cartilage with the bones, and in like manner separated the alæ and septum, every part of the operation being subcutaneous. The nose being now movable was displaced, applied properly, and fixed in situ. A perfect cure took place in each case, so as to do away with the appearance of there having been any deformity.—*Casper's Wochenschrift.*

DYSENTERY.

The time has been when dysentery raged in London like a plague. The present Dr. Heberden, in his valuable essay "On the Increase and Decrease of Different Diseases," shows that in the 17th century the number of deaths set down in the weekly bills of mortality, under the titles *bloody flux* and *griping in the guts*, were never less than 1,000 annually, and in some years exceeded 4,000. For twenty-five years together—viz., from 1667 to 1692, they every year amounted to above 2,000. During the last century the number gradually dwindled down to 20. Dysentery is one of the pests of hot climates. In all tropical regions, at certain seasons of the year, it is very prevalent and destructive. But it is in fleets and armies, and especially among troops in actual service, that the distemper most displays its terrible power. There is no single malady which is so crippling to an army in the field as this. Sir James M'Grigor, to whom was entrusted the superintendence of the medical department of the army, on the two greatest services on which the military force of this country has of late years been employed—namely, that in Walcheren and that in the Peninsula, calls dysentery "the scourge of armies," and "the most fatal of all" their diseases. In two years and a half the British army in Spain lost no less than 4,717 men by this complaint.—*Dr. Watson, Medical Gazette.*

ULCERATION OF THE CERVIX UTERI.

M. Lisfranc was called to a woman labouring under symptoms of uterine disease, and complaining of severe pain in the rectum. Several physicians, who had examined her previously, were of opinion that the cervix uteri was quite healthy, but Lisfranc soon discovered that they had felt only the anterior face of the upper lip of the cervix. By carrying the finger more backwards, and impressing a bas-cul motion to the uterus, he was enabled to ascertain that there was a deep ulceration on the posterior lip of the cervix, which had already destroyed a large portion of it. An error in such a case is easily committed, unless the examination be very carefully made. If the finger were applied only to the anterior lip, a smooth, polished surface would be felt, and if the examination be made with the aid of the speculum, the latter may be so placed as only to show the upper surface of the cervix, which would present a healthy appearance.—*Gazette des Hôpitaux.*

INSPECTION OF COUNTY LUNATIC ASYLUMS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I have read with some attention the proceedings in the House of Commons, as well as the sensible letters addressed to you on the subject of "Inspection of County Lunatic Asylums;" but I cannot perceive that the real defect in the present law has been clearly pointed out by any one, although an attempt has very unjustly been made to throw the fault of the defective working of that law on the medical profession.

By the last act on the subject, the county magistrates were empowered, at quarter-sessions, to appoint certain magistrates and a physician to visit, and report upon the state of all asylums in their county; and I would beg to ask, whether any other classes of society are likely to furnish more independent, impartial, and competent inspectors of those houses, than magistrates so selected, and assisted by a physician of character and established reputation?

The idea of appointing inspectors without the aid of a medical gentleman is so truly absurd, that I cannot suppose that any sensible man can, on reflection, advocate such a plan. If the most talented professional man has, in some instances of insanity, the greatest difficulty in deciding on the propriety of restraint, how can a non-medical one be expected to form a correct judgment in such doubtful cases?

I have been the physician appointed by the magistrates at quarter-sessions (together with three county magistrates) to visit an asylum, about fourteen miles distant from Lynn, for more than twenty years past; I have never missed attending a single visitation during that period of time. The inspections have been made with the greatest care, and the results entered, in books kept for the purpose, by the clerk of the peace, or some person in his behalf.

In my opinion, the present law wants one alteration —viz., to make it *imperative* on the magistrates to visit their respective asylums at least three times in the year, as the act directs; for, notwithstanding my representations on that point, the asylum of which I am visiting physician has not been inspected so frequently as it should have been, nor as the present law directs.

With this single alteration, I believe that the present law will afford the most ample protection to those unfortunate individuals who may be thought to require confinement, without putting the country to any additional expense.

Your obedient servant,

JOHN TWEEDALE, M.D.

Lynn, Norfolk, May 12, 1842.

PROMOTIONS AND APPOINTMENTS.

War-office, May 13.

14th—William Wallace, M.D., to be surgeon, vice Dowse, who exchanges.

55th—William Arden, to be assistant-surgeon, vice Sinclair, promoted.

75th—James Sidney, M.D., to be surgeon, vice Forrest, who exchanges.

Hospital Staff—Surgeon Richard Dowse, to be staff-surgeon of the 2nd class, vice Wallace; Surgeon John Forrest, M.D., to be surgeon of 2nd class, vice Sidney, who exchanges.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted on Friday, May 13, 1842.

Joseph Thomas La Presle, Alfred Tulk, Caleb Rose, Charles Edward Prior, Rowland Tilton, John Wright Long, William Jollie, Alfred Milner Mager, Henry Hamilton, John Howells Thornhill.

Monday, May 16, 1842.

Erasmus Stone, Thomas Herbert Barker, Thomas Philip Dennett, Richard Lead Maddox, William Henry Cane, William Brumfil, Farquhar Milne, John Gordon.

BOOKS RECEIVED.

Popular Cyclopædia of Natural Science—Botany. London: Wright and Co., 1842.

The Bengal Dispensatory and Pharmacopœia. By W. B. O'Shaughnessy, M.D. Published by order of Government. Calcutta, 1841. 8vo., pp. 794.

Dr. Hooper's Physician's Vade-Mecum. Edited by Dr. Guy. London: Renshaw, 1842.

The Theory and Practice of Midwifery. By Fleetwood Churchill, M.D. Illustrated by more than 100 wood-engravings by Bagg. London: Renshaw, 1842. 8vo., pp. 480.

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CASE
OF
GENERAL HÆMORRHAGIC TENDENCY.

By R. T. Hunt,

Assistant-Surgeon to the Eye Institution, Lecturer on Diseases of the Eye, and Consulting Surgeon to the Lying-in Hospital, Manchester.

(For the Provincial Medical Journal.)

The injuries, of which the following communication contains an account, occurred to William Lawson, aged 7½ years. He had no peculiarity of appearance. He had brown hair, grey eyes, moderately clear but not florid complexion, but was at this time (Nov. 7, 1834) thinner than formerly, apparently in consequence of recent severe hæmorrhage. He was always remarkably active and daring, and very passionate. His father, an engraver, had always experienced some difficulty in stopping the bleeding when his fingers were cut with his graver. He died of apoplexy a few months since. His mother, who has had a numerous family, is reported always to have suffered from hæmorrhage after labour. She states that when William was only a day or two old, such profuse bleeding occurred from the navel, that for many days he was not expected to live; that, during the first year, he suffered almost constantly from diarrhœa, and occasionally from tooth-fever; and that when about two years old, he fell against the fender and cut his head. The wound did not bleed much at the time, but the second night afterwards the bleeding increased so much, that it was with great difficulty stopped by plaster and bandages.

February 3rd, 1833. As he was sliding astride down the bannister-rail, he slipped and fell, with his mouth open, against the end of the rail, and thus lacerated the inside of the upper lip near the frænum, which was partially divided; the gums also were torn, and separated from the alveoli. It was an injury that would have caused considerable hæmorrhage from any individual, but the bleeding, for the first two days, was not of any consequence.

5. I saw him for the first time, the bleeding having become very profuse during the last night. There were coagula between the lips and teeth, continual general oozing of arterial-coloured blood from the injured surface, but no jet, nor any vessel bleeding separately, perceptible. A common astringent lotion was applied, and, afterwards, spirit. terebinthinæ, and argenti nitras in substance, by which means the bleeding was slightly checked, but returned at intervals until its effects upon the system had become truly alarming.

7. He was now quite blanched; his voice could scarcely be heard, nor could he raise himself in bed; his extremities were cool; his pulse quick, feeble, small, and irregular; and his pupils widely dilated. He would take nothing but a little milk and water,

and that only occasionally, in consequence of his fearing that it would increase the bleeding. The actual cautery was now freely applied, with the effect of stopping the hæmorrhage, of which there was no recurrence; and in a few days he was sufficiently well to go out, though still much debilitated. The only medicine he took was a common aperient.

March 4. The skin over the left eyebrow was slightly grazed by a brass shoe-horn thrown at him by one of his brothers. The next day when I saw him, blood was constantly oozing from the wound, and no vessel large enough for a ligature perceptible. I applied a very thick compress of lint, supported by adhesive plaster and a bandage. In the morning the dressings were separated from the wound by a coagulum as large as a walnut, which had apparently thrust them off. The nitrate of silver was applied, the dressings replaced, and there was no more hæmorrhage.

April 3, 1834. I again saw him, in consequence of bleeding from the tongue. Two days before he had fallen over a wheelbarrow, and slightly bit his tongue in two places. There had been occasional bleeding till the night of April 2, when it became excessive, the mouth having been repeatedly filled with large coagula. The nitrate of silver in substance was first applied, and a strong alum lotion, the bleeding still recurring. The actual cautery was used three times during the day, a short cessation of the hæmorrhage following each application.

4. The bleeding having continued, the actual cautery was repeated, and lint soaked in spirit. terebinthinæ applied. The system now began to suffer very severely from the loss of blood. The same treatment was continued during the 5th and 6th.

7. The patient being now apparently sinking, two small pieces of wood were applied, one upon, the other under, the tongue, and both posterior to the wounds. These pieces were connected at their extremities by ligatures, by means of tightening which, the tongue was forcibly compressed. This instrument was kept on for twelve hours, when the anterior part of the tongue had become swollen, inflamed, and almost gangrenous, in consequence of which the pieces of wood were removed. Eight hours afterwards the hæmorrhage returned, but was for some time checked by the application of lint soaked in spirit. terebinthinæ. The tongue having by this time recovered from the previous effects of pressure, a pair of spring forceps guarded with lint was applied, but caused so much pain as to render their removal necessary. The instrument, formerly mentioned, was again applied and retained for twelve hours, after which time, the hæmorrhage, which had continued nine days after the accident, with the exception of the intervals recorded, fortunately did not return. No medicine was given until the cessation of the bleeding.

June 15, 1835. He was struck on the vertex with a

stone, which caused an irregularly-triangular laceration, penetrating nearly to the cranium. There was immediately considerable bleeding, which could not be stopped by the usual dressings. On taking off the bandages his mother had applied, a large coagulum was found attached to the lacerated parts, from beneath which blood was continually oozing. After removing this coagulum, a tent of lint was firmly thrust into the wound, and secured in this position by means of strips of lint spread with white of egg and flour, which, in a short time, formed a compact hard covering, nearly as solid as a crab's shell. The following mixture was prescribed :—

Sulphate of soda, one ounce ;
Water, six ounces. To take an ounce every four hours.

16, Nine, a.m. The bleeding had continued all night, and the wound presented nearly the same appearances as before. The dressings were renewed, and the dose of sulphate of soda doubled.

Nine, p.m. The wound bled during the afternoon, but not so freely. The sulphate has not yet acted upon the bowels. The nitrate of silver was applied to the wound, and the dressings replaced.

16. The sulphate of soda has produced several free alvine evacuations, and no more bleeding has occurred.

22. No further hæmorrhage. The dressings remained firmly adherent, and required the application of poultices for their removal.

This boy had never suffered from hæmorrhage of an idiopathic character from any of the mucous surfaces, nor from purpura or any peculiar cutaneous affection.

William Lawson's mother died, the family became dispersed, and after many fruitless inquiries, I at length, by chance, discovered that he had been admitted into the Manchester Bluecoat School ; and, on applying to Mr. Greswell, the surgeon to that institution, he kindly informed me that Lawson had died in August, 1840, in consequence of convulsions supervening upon abdominal affection, apparently caused by too freely eating of fruit, and bathing when in a state of perspiration. There was no post-mortem examination. During his residence in the school he had a slight injury of the hand, which was followed by very troublesome bleeding, similar to that produced by the accidents previously noticed.

REMARKS.

The cases of hæmorrhagic tendency, which first attracted the attention of pathologists, will be found in the " London Medical and Surgical Journal " for 1808, in a communication from Dr. Otto, of Philadelphia, U. S. Upon reference to these and other analogous cases, it will be noticed that some time usually elapsed after the receipt of the injury, previously to the appearance of severe hæmorrhage, the wound not bleeding in the first instance more than similar wounds in other individuals. This is important ; for if we compare the time at which adhesion generally takes place, I believe it will be found to agree with the period of the supervention of hæmorrhage in these instances, provided the injuries be of equal severity. In such hæmorrhagic cases, the process, which has been termed adhesive inflammation, appears not to be accomplished in a normal manner, although the vascular action of the injured parts is increased to an extent apparently sufficient for all the purposes of adhesion. The divided extremities of the vessels, instead of becoming agglutinated by the adhesive medium, not only remain pervious, but appear to acquire an increase in calibre, which allows them to pour out blood so freely as to give it the appearance of exuding from every point of the surfaces of the wound. Whether this irregular performance of the adhesive process depends upon the peculiar condition of the blood in such individuals, or upon some difference in the arrangement of their capillary system, is a question not to be very easily answered. The case I have recorded, is a proof that there is no deficiency in the coagulative power of the blood ; the coagula having firmly adhered to the surrounding uninjured structures, although the oozing from the wounds was continuous.

The failure of local treatment until the bleeding had proceeded so far as to threaten a fatal termination, and the consideration that injuries occurring in structures differing so much in their organisation were, when of equal severity, always followed by equally profuse hæmorrhage, would incline me to depend upon general treatment. I do not consider the slight trial given to the sulphate of soda in Lawson's case as very conclusive when separately viewed. But it acquires value when considered in connection with the treatment pursued in Dr. Otto's cases. I may add, that I should be inclined to place the greater reliance upon its efficacy, in consequence of my having for many years observed the beneficial effects of various saline preparations in affections of the vascular system, in which these are not usually administered.

May 11, 1842.

ON

CONTUSIONS OF MUSCLES.

By William Allison, Esq., Surgeon, East Retford.

The most interesting circumstance connected with contusions of muscles is the difficulty of distinguishing those injuries from dislocations or fractures of those bones which form cups for joints. Muscles are bruised by falls or blows ; a limb is consequently stiff (whilst lengthened or shortened), and it becomes motionless at a joint, so that neither flexion nor extension can be performed by the subject of the accident ; and sometimes considerable swelling ensues before a medical man arrives. The surgeon's attempt to move the limb, in order to ascertain the nature of the injury, produces a painful, spasmodic action of muscles, sometimes without proving advantageous to himself, in his endeavour to find out the precise cause of the loss of muscular action and the stiffness of the limb. And whilst the surgeon has no means of completely satisfying himself with respect to the accident, he is closely questioned by the patient and his friends, and must either express his doubts or give indirect answers. We all know that by sleeping with the head upon the arm, so as to make good pressure on the median nerve, we may become unable, during many minutes after waking, to move the forearm ; that by sleeping cross-legged in a chair, so as to make a firm pressure

upon the popliteal nerve, we may be, during many minutes, unable to stand upon the leg; that rheumatic stiffness may require great muscular efforts to restore the use of the limbs; and that sometimes after fractures of the arm or thigh, one means only can overcome the muscular rigidity, and restore action—namely, the frequent, resolute efforts of the patient himself to put the muscles in action; but I think it behoves us especially to ascertain the different effects and the practical consequences of violent muscular contusions.

1. The muscle or muscles may be so bruised as to be simply benumbed (with tonic or permanent contraction or with relaxation), the nerves being affected by the fall or blow, something like the brain from concussion.

Case I.—Mr. Smith, of this town, remained with his leg, for half an hour, under a horse which had fallen with him, and which had then laid upon him, the horse having made fruitless attempts to get up whilst the leg was under him. Mr. Smith could not move his leg when first lifted up; but, being supported, he made great efforts to use it, until in ten or fifteen minutes he gradually became able to walk.

Case II.—A woman, named Parkin, of Ordsall, fell from a load of hay upon the hard ground, in a very hot, dry summer; her thigh was for some weeks in the exact position of a dislocation into the ischiatic notch. By forcible extension I could place the limb in the natural position without pain; but it always returned to the apparently dislocated position. No fracture of the acetabulum nor of the neck of the thigh-bone could be felt. In four or five weeks she recovered the use of the limb.

2. The muscles may be bruised whilst in action, and remain stiff (with atonic contraction or with relaxation) so long as they are left at rest; but the moment an attempt is made by the patient or surgeon to move the limb, a violent, painful quivering or irregular spasmodic action comes on, and the limb cannot be placed in the natural position.

Case III.—A boy was carrying two pails full of water, suspended from his shoulders; in attempting to step down with them, from a very highly-raised causeway, he slipped backwards and sideways upon the edge of the causeway, shooting his heels before him. On my arrival his leg presented the appearance of a dislocation upon the pubis. Every attempt to bring that knee to a level with the other, either on a mattrass or when standing upon the sound limb, failed; but it produced painful, spasmodic muscular action. The chief pain was in the groin, where there was a swelling; but as the head of the thigh-bone could not be felt there, I proclaimed the accident to be "a serious injury of the muscles," which probably would continue some weeks. By leeches, fomentations, &c., the boy recovered in a week.

3. Muscles may be bruised, with extravasation or some injury ending in suppuration.

Case IV.—I was called (July 1) to a lady who had been thrown out of a pony carriage in this town; her shoulder was dislocated, and her leg was bruised. Both before and after the dislocation was reduced she walked twenty or thirty yards very well, and she was sent home, a few miles off, in a chaise. The leg swelled, and became stiff and useless (to herself immovable). After leeches, fomentations, poultices, &c., had been used, with entire rest for upwards of five weeks, she became alarmingly ill, with high constitutional disturbance during her seventh month of pregnancy; and in about a week from that time (on the 17th of August) I opened a deep-seated abscess under the fascia of the gastrocnemius muscle, after which she became perfectly well, before her confinement (on the 17th of October), from which she recovered as usual.

4. Muscles may be bruised, with a laceration of fibres.

Case V.—In June, 1839, I was desired to visit a stout, heavy, muscular man, who, it was supposed, had dislocated his hip. On my arrival I heard that, whilst sitting upon the shelvings of a cart, he fell backwards with his shoulders upon the wheel, and reached the ground (hard sand-rock) in about the sitting position. Moving the limb gave excruciating pain, and occasioned spasmodic muscular contraction; nevertheless, after having placed his shoulders and hips in a straight line upon a mattrass, and having grasped each ancle with one hand, I drew him downwards towards the bottom of the mattrass, when I found the inner ancle-bone of the injured side full an inch and a quarter below the other, with the heel inclining inwards. I could bend the knee upwards towards the abdomen, but could not cross one thigh over the other. Adduction could be effected with some difficulty; but this limb was always longer than the other by an inch and a quarter, with the knee separated, and the toes turned outwards when in the easiest position, and there was a constant pain in the perineum. If the case had been one of dislocation into the foramen ovale, I supposed adduction could not have been effected, and I was not aware that it could be any other variety of dislocation. There was no crepitus about the joint; I, therefore, believed it to be lengthening of the limb, mentioned by the late Sir A. P. Cooper, and delivered my opinion decisively, "that there was not any dislocation." However, I felt much more satisfied after my partner had accompanied me on my next visit. To the question, "What *is* the accident?" we replied, "A rupture of some part of the muscle which forms the buttock."

The gentleman was bled in the arm, took an opiate, had his hip fomented, and warm, damp linen kept upon the painful part; he then took castor oil; on the following morning twelve leeches were applied, and afterwards poultices. We cannot lift patients so affected into and out of warm baths; he was kept in the easiest posture, &c., and the case went on quietly; but the lengthened state of the limb, the inability to move it without violent pain for some weeks, and the sensation of something in the perineum, gave rise to doubts amongst his friends respecting a dislocation. In this case extension of the rigid muscles after the second week, by pullies applied as if for a dislocation into the foramen ovale, until fainting was produced, appeared to be serviceable. The consequences of the accident were, not only that the limb gradually became of the same length as the other, but that contraction went on until it was about an inch shorter,

as it remains to this day, that he halts in walking, and that he cannot ride on horseback without making the hip and thigh muscles very painful. I have on several occasions seen limbs as rigid from falls and bruises, when all attempts at motion have given violent pain; but in this case I cannot account for the lengthening and subsequent shortening of the limb, but by a laceration of muscular fibres. He can now walk ten or fifteen miles in a day without fatigue.

In relating the foregoing cases, I may not have classed them correctly. For instance, the pregnant lady may have had some laceration of the deep-seated tissues of her leg, as the carriage wheel had evidently passed over it; but that being now doubtful, merely serves to show the difficulty of stating the precise extent of injury at the first visit after an accident.

A surgeon, called to reduce a dislocation, has to distinguish one from a fracture near the joint; and sometimes, in forming his diagnosis, he is perplexed by muscular rigidity; at other times by considerable tumefaction from extravasation of blood; and on some occasions by extreme tension from effusion, the consequence of inflammation. As the late Sir A. P. Cooper, when speaking of dislocations, said, "Few accidents are more likely to endanger the reputation of the surgeon, as the patient may become a living memorial of his ignorance." I shall not apologise either for having called the attention of surgeons in the commencement of their career to this particular part of their practice, or for reminding them further that the biceps tendon may be ruptured, or that it may be displaced from its natural situation in passing over the head of the os humeri.

VACCINATION DEFENDED AGAINST THE ATTACKS OF MR. BROWN.

Letter IV.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—In resuming my observations on Mr. Brown's letters to Dr. Gregory, I beg to direct your attention, and that of your readers, to the experiments detailed in Letter III., pp. 55—56. These are for the purpose of ascertaining the influence of the vaccine upon the variolous malady; and the result seems to be, that when the two poisons were introduced into the same system, at the same time, or within two or three days of each other, constitutional small-pox was produced, notwithstanding that the local affection of the vaccine vesicle was perfect; that if variolous matter were introduced two or three days after vaccination, the result was small-pox somewhat modified; but that if five or six days were suffered to intervene between the two processes, the influence of the small-pox inoculation was totally subdued. It is unnecessary to notice the endeavour to produce a hybrid disease.

Now, really, if these experiments be of any practical value, it is, either that they tend to prove the identity of the two diseases, or the prophylactic agency of the one over the other.

First, the disorders are identical; they run the same course uninterrupted the one by the other; and the result is the same, except only this, that the one is a much milder form than the other. Yet if this be granted, where is the utility and what the object of Mr. Brown's speculations, for if the two maladies are the same, only the one is a milder and the other a severer form, in the name of common sense, why prefer the latter to the former?

But, secondly, the vaccine is a prophylactic against small-pox, according to Mr. Brown's experiments—that is, give it fair play; let it have time enough to produce its influence upon the constitution before the more active morbid poison shall have developed its agencies, "and the influence of the small-pox inoculation was totally subdued."

Such, however, was not the result, when the two poisons were introduced together and at the same time. Is there anything extraordinary in the fact, that two morbid poisons being introduced into the constitution at the same time, one very mild the other very violent, the latter should supersede the former? Is it not consonant with reasoning and experience, that the more powerful agent should extinguish the less powerful agent, granting that the same favouring circumstances should be given to both? This fact, therefore, will not in any way detract from the value of vaccination.

If we pursue Mr. Brown's experiments we find, that if the vaccine poison were introduced three days before the variolous, its modifying influence upon small-pox was most marked; and that if the interval were extended to five or six days, the influence of small-pox was entirely subdued. Such, then, is the result of Mr. Brown's own experiments—they prove the power of vaccination over small-pox, incomplete unless a proper precedence shall have been given to the former, complete and entire if this necessary rule shall have been complied with. Even according to Mr. Brown's own showing, therefore, vaccination is a perfect prophylactic against small-pox; the duration of the security thus afforded is another question not now before us. This is more than the judicious vaccinist contends for, as has been previously shown.

I cannot pass over this part of Mr. Brown's treatise, without adverting to a note of very mischievous tendency at p. 56, in which he remarks that this "class of experiments seems to afford the very best expedient against the small-pox epidemic, short of the practice of inoculation." What! shall a class of experiments, which produces complete small-pox in the first series, and modified small-pox in the second, in all probability both capable of diffusing genuine small-pox through the neighbourhood, and so producing the epidemic—shall such a class of experiments go forth to the world as the best expedient for putting an end to small-pox? Really, I can only account for such a recommendation by supposing a supernatural influence upon Mr. Brown's reasoning powers—*Quem Deus vult perdere, prius dementat.*

But Mr. Brown combines these experiments, the truth of which we cheerfully grant him, with cases of failure of protection from small-pox, by vaccination, during an epidemic which raged in his own neighbourhood, when he became convinced that there was some deficiency in "the absolute and permanent power of the vaccine process against small-pox." Although we by no means discover this, as a consequential reasoning from the experiments cited above, yet we are

ready to admit the inference. But we must crave to place by its side a parallel inference—viz., that when we look to the fact, that small-pox inoculation will have no influence in mitigating the severity of the disease previously contracted in the natural way; that it will exert this modifying influence in some measure, if a certain interval shall have been given before the bursting forth of natural small-pox; that its modifying influence will be complete and entire, provided the full effect of inoculation and preparation of the constitution shall have taken place before exposure to the variolous epidemic; and that cases of secondary small-pox do occur, and that in a form not mitigated, or scarcely mitigated, by the primary visitation; and, therefore, we cannot resist the conviction that there must be "some deficiency in the absolute and permanent power" of small-pox inoculation against a future small-pox epidemic. Thus, then, as a matter of science, the two maladies rest on precisely the same footing, the practical difference being this, that perhaps (though this is not proven) there may be a greater number of failures from vaccination, but a far greater number of deaths from secondary small-pox!

I find that, in conducting the process of vaccination, Mr. Brown made it an absolute rule to take the lymph from the vesicle before it had assumed its areola, or during its existence; and here we shall find sufficient cause for many of his failures; for, undoubtedly, the perfect vaccine process is only to be perpetuated by taking lymph from the vesicle before the areola has formed—that is, before the irritation of simple inflammatory action has commenced. What those cases are, in genuine vaccination, where the vesicle puts on a "dull, purple, or blueish appearance, and where it is necessary to guard against troublesome ulcerations by local applications, and even by using means to increase the tone and vigour of the system," I confess I am at a loss to conceive, and can only account for by the supposition, that the lymph which Mr. Brown employed was of an improper quality, and partaking of an altered and more virulent character, in consequence of the above-named simple inflammatory action in the vesicle.

There can be no doubt that Mr. Brown states many truths in this letter, and that the injudicious friends of vaccination have sometimes claimed too much for it. But this kind of enthusiasm, though always injurious to a cause, is, after all, only the ill-judged enthusiasm of partially informed advocates, and militates nothing against the perfection of the process in its own proper sphere. No honest, well-informed medical man can, however, recommend variolous inoculation after vaccination; and no right-minded parent will ever think of submitting her offspring to a process, the result of which might be a disease from which there is every chance of permanent escape during life, and after which the constitution would not be safer (perhaps not so safe) from the malignant consequences of a future attack.

We must again notice Mr. Brown's conclusions; but, as they are not based on any facts or reasonings which have preceded, we must meet them rather by a string of counter-conclusions, drawn from our own experience, than by direct argumentation.

1. Mr. Brown considers the anti-variolous power of the vaccine as nearly safe for three or four years; that from that period to ten years it mitigates the attack of small-pox, but that after ten years it has little or no influence upon the progress of variola, the malignancy of which is steadily upon the increase, in proportion as the attack is distant from vaccination.

We assert, on the contrary, that distance of time, as such, has no influence upon the protecting power of vaccination. It is surprising that any ordinary observer should not have discovered that, during the first three or four years of infancy, children were generally secluded in the parental residence, and consequently not much in danger of meeting with variola; but that, in proportion as they grew up, went to school, and to service, so would they more frequently be exposed to the infection of small-pox; and so, in the comparatively rare instances of its attack after vaccination, would it be severe, not in proportion to the distance of time from vaccination, but in proportion to the influence of that general law of the constitution by which all eruptive disorders are more severe in adult than in infantile life. One only feels infinite surprise that so simple a truth should have been overlooked, for the purpose of aiding a favourite hypothesis.

We assert, therefore, that vaccination, properly performed, does afford protection against small-pox, and that this protection, though not absolutely perfect, is uninfluenced by time.

2. Mr. Brown next asserts what may, very probably, be true, and which we readily grant, as being of no consequence to the argument, that the severity of the attack of small-pox after vaccination is proportioned to the severity of the epidemic. Can anything be more probable than that, in those constitutions which have not been perfectly protected by vaccination, the severity of the varioloid malady should be in proportion to the intensity of the producing cause?

3. Again, Mr. Brown remarks, that constitutions which resist the inoculation of small-pox, and exposure to its epidemic infection at one time, will be susceptible of its impression at another. Can anything be more strictly consonant with the general laws which regulate susceptibility to disorder? Is it not a fact of every day occurrence, with regard to many other forms of malady?—and of what avail is this conclusion to the matter in hand? Is it not a well known fact, with regard to this very malady, that one of the earliest inoculators (I think one of the Suttons), who had attended his patients for thirty years with impunity, then caught small-pox and died?

4. Mr. Brown next affirms that there is no truth in the assertion that vaccination requires superior abilities to conduct it, or was at the first imperfectly understood; and, in proof of this affirmation, he alleges the fact (the single fact, if it be a fact) that a lady vaccinated 1,800 individuals without any subsequent failure, as if any casuist, however keen, is warranted in founding an inference so sweeping upon such a solitary fact, even if it were indubitable.

We reply, however, that superior abilities are not so much wanting as habits of acute observation, and attention to minute phenomena, which Mr. Brown either does not or cannot appreciate; and, setting aside these habits, we are not surprised at the frequent failures in Mr. Brown's experience, for the simple reason that the parties never received the protection said to have been afforded.

Lastly, through the obscurity of language of Mr. Brown's last conclusion, and its several grammatical inaccuracies, it is difficult to descry precisely what he does mean; but we believe that it is this; from the whole of the preceding facts (assertions) it is ascertained that the anti-variolous power of the vaccine is entirely lost in twenty years—that three-fourths of the vaccinated poor will be found to have undergone small-pox before they reach the age of ten or twelve years, and that of the higher classes, though the number be less, yet it is rapidly increasing, "and a more severe, dangerous, and fatal attack of small-pox are (is) found to be the consequence;" so that the only good resulting from vaccination is to give the semblance of a false security, and to increase the severity and fatality of small-pox!

Really, this is too much; and yet these are the words of the author, who must surely have calculated largely upon the credulity or the ignorance of his readers, before he could have ventured to put forth a conclusion so utterly at variance with experience, so perfectly unfounded, so thoroughly extravagant and irrational.

I and my father have been zealous *gratuitous* vaccinators for more than thirty years; we have, therefore vaccinated a great many poor, as well as our own private patients. Of these we have records of about twenty failures in somewhat more than 5,000 cases; all of those failures were succeeded by a mild form of modified small-pox, without one death, and this notwithstanding the exasperation of small-pox by vaccination!!

I might refer to other facts, but I prefer giving my own experience, to set against the experience of Mr. Brown; and with this fact I take my leave of the subject till next week.

I am, faithfully yours,

W. Newnham.

STATISTICS OF AMPUTATIONS

PERFORMED IN

THE PARISIAN HOSPITALS.

By M. Malgaigne.

The number of amputations reported to the committee of hospitals, as having been performed in the Parisian hospitals, from the 1st of January, 1836, to the 1st of January, 1841, amounted to 852. Of these were, one amputation at the hip-joint; 201 of the thigh; 3 at the knee-joint; 192 of the leg; 38, partial, of the foot; 8 of the metatarsal bones; 85 of toes. *Total* 528, of the lower extremity.

For the upper extremity—14 at the shoulder-joint; 91 of the arm; 28 of the forearm; 16 at the wrist joint; 9 of the metacarpal bones; 166 of the fingers. *Total*, 324.

The general mortality was 332, or about 2 in 5—viz., 255 for the lower extremity, or nearly one-half; 77, or about one-fourth, for the upper extremity.

1. *Amputation of Thigh.*

One amputation at the hip-joint in a medical student, aged 21, who had been wounded in a duel.

Of the 201 amputations of the thigh, 126 were followed by death, or nearly 62 per cent. It is necessary, however, to distinguish between operations consequent on injuries and those performed for chronic disease.

a. Of the first class, 46; 34 deaths; 12 cures.

b. Of the second class, 153; 92 deaths to 61 cures, or three deaths out of every five operations.

In addition to these were two amputations, performed successively, by M. Velpeau, on a young man, for anchylosis of both knees, who recovered.

Ages.—Amputations after Injuries.—From 4 to 15 years, 4 cases, 4 deaths; from 15 to 35 years, 26 cases, 18 deaths; from 35 to 70 years, 16 cases, 12 deaths.

Amputations after chronic disease.—From 5 to 15 years, 24 cases, 8 deaths; 15 to 35 years, 90 cases, 52 deaths; 35 to 70 years, 39 cases, 32 deaths.

From the above it would appear that operations on persons of tender age are by no means so free from danger as has been supposed.

2. *Amputation at the Knee-joint.*

This operation had been almost completely abandoned, when it was revived in 1830, by M. Velpeau. The results were so unfavourable that it has again fallen into disuse. Of 9 cases, 7 proved fatal.

3. *Amputation of Leg.*

The number of cases amounted to 192; of these 106 died, about 55 per cent. Of the whole number, 112 were performed in consequence of disease, and gave a mortatity of 55; 79 after injuries, with a mortality of 50.

Finally, one young man, affected with club-foot, was operated on at the Hotel-Dieu, and died. Here, also, as in the former cases, the mortality amongst young subjects was very great in cases of amputations after injuries; it amounted to 3 out of 4.

4. *Partial Amputation of Foot.*

This was performed in 38 cases, either after Chopart's method, or between the tarsus and metatarsus. The mortality was 9 in 38, or 24 per cent.; but here the difference of mortality between operations after injuries and after disease was most striking; in the former case being 6 out of 9; in the latter 3 out of 29 cases.

5. *Amputation at the Shoulder-joint.*

The danger of this operation has been variously estimated by different surgeons. M. Larrey says that it succeeded in his hands 90 times out of 100; and Percy affirms that of 70 cases about one-sixth proved fatal.

Civil practice furnishes far different results. Of the 13 cases 10 proved fatal; in 7 the operation was performed in consequence of injuries, and all died; in 6, for organic disease, and 5 of these recovered.

6. *Amputation of Arm.*

In 91 cases, 41 deaths, or about 45 per cent. For organic disease 61 operations, 24 deaths; for injuries 30, 17 deaths.

7. *Amputation of Fore-arm.*

In 28 cases 8 deaths, or 28 per cent. For organic disease 17 cases, 5 deaths; for injuries 11 cases, 3 deaths.

8. *Amputation of Wrist-joint.*

During five years amputation was performed at this joint in 16 cases, and all the patients recovered.

9. *Amputation of Metatarsal and Metacarpal Bones.*

In 8 cases some one of the metatarsal bones was am-

putated, and 1 death occurred; in 9 cases one of the metacarpal bones, and here also 1 death occurred.

10. *Amputation of Toes.*

The great toe was disarticulated in 43 cases, of which 7 proved fatal. The operation was performed in 29 cases for disease, in 14 for injuries; of the former 3 proved fatal, of the latter 4. The small toe was removed in 26 cases, with 1 fatal result. In 7 cases, where two of the toes were removed together, there was 1 death. Amputation of one or more phalanges was performed in 9 cases, without any accident.

11. *Amputation of Fingers.*

I have not found it mentioned in any treatise on operative surgery that amputation of the thumb is peculiarly dangerous. It was performed in 9 cases; in 1 for a supernumerary thumb; in 3 for organic disease; in 5 after injury; of the latter 5 no less than 3 proved fatal. The number of cases of amputation of a finger amounted to 119, amongst which were 10 deaths. In 79 cases the operation was performed in consequence of organic disease; here the mortality was 6. In 40 cases it was performed after injuries, with 4 deaths.

In 13 cases several fingers at a time were amputated; only 1 case proved fatal. Finally, one of the phalanges was removed in 24 cases, of which 1 ended in death.

To be continued.

REVIEW.

Chemistry in its application to Agriculture and Physiology. By Justus Liebig, Ph. D. Second Edition. Edited by Lyon Playfair, Ph. D. London: Taylor and Walton, 1842. 8vo, pp. 410.

Although the subjects treated in this original and highly interesting volume may seem to bear but slight relation to the science or practice of medicine, we cannot avoid directing to it the attention of our readers.

Perfect agriculture, as the author remarks, is the true foundation of all trade and industry—it is the foundation of the riches of states. But a rational system of agriculture cannot be formed without the application of scientific principles, for such a system must be based on an exact acquaintance with the means of nutrition of vegetables, and with the influence of soils and action of manure on them. This knowledge we derive from chemistry, and the volume which now lies before us contains the results of Liebig's researches in its pursuit.

Professor Liebig's work is divided into two parts; in the first he explains the chemical processes which take place during the nutrition of vegetables; in the second, the chemical processes which occur during fermentation, decay, and putrefaction. The chemical history of the life and death of the vegetable kingdom is thus placed before us in all its details. In the following articles we shall endeavour to furnish a succinct analysis of this history, which is replete with matter of high interest to the physiologist and of utility to the public.

Constituent Elements of Plants.

The ultimate constituents of plants are those which form organic matter in general—namely, carbon, hydrogen, nitrogen, and oxygen. Carbon is familiarly known as *charcoal;* hydrogen contributes to form the watery parts of plants; the phenomena of decay depend on its affinity for oxygen, and many of the processes of nutrition originate in an attempt to gratify this affinity.

Nitrogen has little affinity for other bodies, from which it escapes under the influence of very slight forces. Hence, after the death of a plant, it materially assists in promoting decay, by escaping from the compounds of which it formed a constituent. Finally, oxygen is a gaseous substance, possessing a most extensive range of affinities, and contributing mainly to the phenomena of combustion and decay. These four elementary bodies, variously combined, or united with inorganic bases, constitute plants; hence the development of a plant requires the presence, first, of substances containing carbon and nitrogen; secondly, of water and its elements (oxygen and hydrogen), and lastly, of a soil to furnish the inorganic matters which are likewise essential to vegetable life.

Having proceeded thus far, the first question which naturally presents itself is, whence do plants obtain their different organic constituents—carbon, hydrogen, nitrogen, and oxygen? We shall examine these different points in succession.

Assimilation of Carbon.

Liebig demonstrates, by a series of arguments which we need not repeat, that *humus* or vegetable mould, manure, &c., do not serve for the production of carbon and have no influence on it, because the quantity of carbon produced by manured lands is not greater than that yielded by lands which are not manured. Whence, then, do vegetables obtain their carbon, if not from the soil? The answer is, from the atmosphere, and the carbon contained in the atmosphere exists there in the form of carbonic acid.

These two latter points involve the consideration of two most remarkable natural phenomena, which by their reciprocal and uninterrupted influence maintain the life of the individual animals and vegetables, and the continued existence of both kingdoms of organic nature.

The composition of the atmosphere, which surrounds this globe, has been found to be the same at every period of time and in every climate of the world; it has remained unchanged during the lapse of centuries and is unaffected by locality; one hundred volumes of air invariably contain twenty-one volumes of oxygen. On the other hand, large quantities of oxygen are daily abstracted from the atmosphere, while immense masses of carbonic acid flow annually into it. How, then, is the equilibrium kept up?—how does the composition of the atmosphere constantly remain the same? By the influence of the vegetable kingdom. Plants decompose the carbonic acid of the atmosphere, appropriating the carbon for the formation of their principal constituent substances, and restoring the oxygen to the atmosphere for its purification.

"This remarkable property of plants has been demonstrated in the most certain manner, and it is in the power of every person to convince himself of its existence. The leaves and other green parts of a plant absorb carbonic acid, and emit an equal volume

of oxygen. They possess this property quite independently of the plant; for if, after being separated from the stem, they are placed in water containing carbonic acid, and exposed in that condition to the sun's light, the carbonic acid is, after a time, found to have disappeared entirely from the water. If the experiment is conducted under a glass receiver filled with water, the oxygen emitted from the plant may be collected and examined. When no more oxygen gas is evolved, it is a sign that all the dissolved carbonic acid is decomposed; but the operation recommences if a new portion of it is added."

"Thus the life of plants is closely connected with that of animals, in a most simple manner, and for a wise and sublime purpose.

The presence of a rich and luxuriant vegetation may be conceived without the concurrence of animal life, but the existence of animals is undoubtedly dependent upon the life and development of plants.

Plants not only afford the means of nutrition for the growth and continuance of animal organisation, but they likewise furnish that which is essential for the support of the important vital process of respiration; for besides separating all noxious matters from the atmosphere, they are an inexhaustible source of pure oxygen, which supplies the loss which the air is constantly sustaining. Animals on the other hand expire carbon, which plants inspire; and thus the composition of the medium in which both exist, namely, the atmosphere, is maintained constantly unchanged."

Origin and Action of Humus.

Having shown that the carbon of plants is derived from the atmosphere, Liebig proceeds to inquire what power is exerted on vegetation by the humus of the soil, and the inorganic constituents of plants, and also to trace the sources of their nitrogen.

Humus is woody fibre in a state of decay. When this substance is placed in contact with air or oxygen gas, it converts the latter into an equal volume of carbonic acid; if the latter be removed, and fresh oxygen furnished, the decay recommences, and the process goes on for a considerable time, until the combustion is complete. The presence of water is necessary for its maintenance; alkalies promote it, but acids retard it; and all antiseptic substances cause its complete cessation.

Humus acts in the same manner in a soil permeable to air as in the air itself; the cultivation of land, by tilling and loosening the soil, causes a free access of air; the particles of decaying humus decompose this air, and an atmosphere of carbonic acid is thus contained in every fertile soil, and is the first and most important food for the young plants which grow in it. This food is taken up by the roots of the plant during spring, before it has appeared above ground; for when the plant is matured, and when the organs by which it obtains food from the atmosphere are formed, the carbonic acid of the soil is no further required.

The size of a plant is proportional to the surface of the organs which are destined to convey food to it. A plant gains another mouth and stomach with every new fibre of root and every new leaf. The power, also, of taking up nourishment does not cease as long as nourishment is present. When the food of a plant is in greater quantity than its organs require, new ones are formed to consume the superfluous materiel.

In addition to the simple process of nutrition, transformations of existing compounds are taking place during the whole life of a plant.

"In consequence of these are produced gaseous matters which are excreted by the leaves and blossoms, solid excrements deposited in the bark, and fluid soluble substances which are eliminated by the roots. Such secretions are most abundant immediately before the formation and during the continuance of the blossoms; they diminish after the development of the fruit. Substances containing a large proportion of carbon are excreted by the roots and absorbed by the soil. Through the expulsion of these matters unfitted for nutrition, the soil receives again with usury the carbon which it had at first yielded to the young plants as food, in the form of carbonic acid.

The soluble matter thus acquired by the soil is still capable of decay and putrefaction, and by undergoing these processes furnishes renewed sources of nutrition to another generation of plants; it becomes *humus*.

The cultivated soil is thus placed in a situation exactly analogous to that of forests and meadows; for the leaves of trees which fall in the forest in autumn, and the old roots of grass in the meadow, are likewise converted into humus by the same influence: a soil receives more carbon in this form than its decaying humus had lost as carbonic acid.

Plants do not exhaust the carbon of a soil in the normal condition of their growth; on the contrary, they add to its quantity. But if it is true that plants give back more carbon to a soil than they take from it, it is evident that their growth must depend upon the reception of nourishment from the atmosphere in the form of carbonic acid. The influence of humus upon vegetation is explained by the foregoing facts in the most clear and satisfactory manner.

Humus does not nourish plants by being taken up and assimilated in its unaltered state, but by presenting a slow and lasting source of carbonic acid which is absorbed by the roots, and is the principal nutriment of young plants at a time when, being destitute of leaves, they are unable to extract food from the atmosphere.

In former periods of the earth's history, its surface was covered with plants, the remains of which are still found in the coal formations. These plants—the gigantic monocotyledons, ferns, palms, and reeds—belong to a class to which nature has given the power, by means of an immense extension of their leaves, to dispense with nourishment from the soil. They resemble in this respect the plants which we raise from bulbs and tubers, and which live while young upon the substances contained in their seed, and require no food from the soil when their exterior organs of nutrition are formed. This class of plants is even at present ranked amongst those which do not exhaust the soil.

The necessity of the existence of plants such as these at the commencement of vegetation, must now be apparent. Humus is a product of the decay of vegetable matter, and therefore could not have existed to supply the first plants with the food necessary for the development of the more delicate kinds. Hence the plants capable of flourishing under such circumstances could only be those which receive their nourishment from the air alone. By their decay, however, the soil in which they grew became supplied with vegetable matter, and the progress of vegetation must have furnished to the earth materials adapted for the development of those plants, which depend upon the nutriment contained in the soil, until those organs are formed which are destined for the assumption of nourishment from the atmosphere."

Assimilation of Hydrogen.

All the hydrogen necessary for the formation of an organic compound is supplied to a plant by the decomposition of water. The process of assimilation,

in its most simple form, consists in the extraction of hydrogen from water, and of carbon from carbonic acid, in consequence of which, either all the oxygen of the water and carbonic acid is separated (as in the formation of caoutchouc, volatile oils containing no oxygen, and similar substances), or only a part of it is exhaled.

"The vital process in plants is, with reference to the point we have been considering, the very reverse of the chemical processes engaged in the formation of salts. Carbonic acid, zinc, and water, when brought into contact, act upon one another, and *hydrogen is separated*, while a white pulverulent compound is formed, which contains carbonic acid, zinc, and the oxygen of the water. A living plant represents the zinc in this process: but the process of assimilation gives rise to compounds, which contain the elements of carbonic acid and the hydrogen of water, whilst *oxygen is separated.*"

Assimilation of Nitrogen.

Nitrogen exists in every part of the vegetable structure. We may, therefore, ask, how and in what form does nature furnish nitrogen to vegetable albumen, and gluten to fruits and seeds?

The nitrogen is obtained through the means of ammonia. We have not the slightest reason for believing that the nitrogen of the atmosphere contributes to the process of assimilation in plants and animals. On the other hand, we have numerous facts to show that the formation in plants of substances containing nitrogen (such as gluten) takes place in proportion to the quantity of nitrogen which is conveyed to their roots in the state of ammonia derived from the putrefaction of animal matter.

But this opinion derives greater certainty from the following consideration:—Let us suppose a large and well-cultivated farm, independent of assistance from other quarters. The land is cultivated without the importation of any foreign substance containing nitrogen. A certain quantity of nitrogen is exported every year in the corn, cattle, and other products of the farm; yet, after a given number of years, the quantity of nitrogen will be found to have increased. Whence comes this? From the atmosphere. All animal bodies, during their decay, yield the nitrogen which they contain to the atmosphere, in the form of ammonia; the latter, in its gaseous form, as well as all its volatile compounds, is extremely soluble in water, and every shower of rain condenses and conveys it to the surface of the earth. Chemists have hitherto failed in detecting ammonia in rain-water; but in some experiments made in the laboratory at Giessen, on several hundred pounds of rain-water, a very distinct crystallisation of sal ammoniac was obtained.

A certain portion, then, of the ammonia, which falls with the rain, is taken up by the roots of plants, and entering into new combinations in the different organs of assimilation, produces albumen, gluten, quinine, morphia, and a number of other compounds containing nitrogen.

Many facts prove that nitrogen is really taken up by the roots of plants, in the form of ammonia, and in that form applied by their organs to the production of the azotised matters which they contain; but the most convincing proof is derived from the employment of animal manure in the cultivation of grain and vegetables, which serve for fodder to cattle.

The quantity of gluten contained in different kinds of wheat may vary from 3 to 35 per cent., and this variation is in great measure regulated by the nature of the manure employed. Thus 100 parts of wheat, grown on a soil manured with cow-dung (a manure containing the smallest quantity of nitrogen), afforded only 11.95 parts of gluten; whilst the same quantity, grown on a soil manured with human urine, yielded the maximum of gluten—namely, 35.1 per cent. Again, it is sufficient to add a small quantity of *guano* to a soil which consists only of sand and clay, in order to procure the richest crop of maize. Now, the soil does not contain the smallest particle of organic matter, and the manure employed is formed of compounds of ammonia with a few earthy salts.

The principal object of agriculture consists in the production of *nitrogen* under any form capable of assimilation. Human urine is the most powerful manure for all vegetables containing nitrogen; that of horses and horned cattle contains less of this element, but infinitely more than the *solid excrements* of these animals. But it is much less the quantity of ammonia, yielded to a soil by animal excrements, than the form in which it is presented by them, that causes their great influence on its fertility. In order to produce its greatest effect, the ammonia should be presented in the state of some salt, for then, instead of being rapidly volatilised and lost in the air, it is dissolved by water, and with it carried to the roots of the plants.

The influence of gypsum or chloride of lime on the growth of grasses simply consists in their fixing in the soil the ammonia (nitrogen) of the atmosphere, which would otherwise be volatilised, with the water, which evaporates.

"In order to form a conception of the effect of gypsum, it may be sufficient to remark that 110 lbs. of burned gypsum fixes as much ammonia in the soil as 6,880 lbs. of horse's urine would yield to it, even on the supposition that all the nitrogen of the urea and hippuric acid were absorbed by the plants without the smallest loss, in the form of carbonate of ammonia. If we admit with Boussingault that the nitrogen in grass amounts to one-hundredth of its weight, then every pound of nitrogen which we add increases the produce of the meadow 100 lbs., and this increased produce of 100 lbs. is effected by the aid of a little more than 4 lbs. of gypsum."

Powdered charcoal also possesses, in a very high degree, the property of condensing ammonia within its pores; and this explains another use of humus or decaying wood, which, in this respect, resembles charcoal. Hence the humus is not only a slow and constant source of carbonic acid, but it is also a means by which the necessary nitrogen is conveyed to plants. To conclude—

"Carbonic acid, water, and ammonia, contain the elements necessary for the support of animals and vegetables. The same substances are the ultimate products of the chemical processes of decay and putrefaction. All the innumerable products of vitality resume, after death, the original form from which

they sprung. And thus death—the complete dissolution of an existing generation—becomes the source of life for a new one."

In our next article we shall take up the subject of the inorganic constituents of plants. In the mean time, we would warmly recommend this interesting volume to the attention of our readers.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, MAY 28, 1842.

After a contest of six years, during which victory has generally been to the strong and the oppressor, we have at length obtained a signal advantage over the poor-law commissioners.

The attempt of the triumvirate at Somerset-house to enslave the medical profession in Ireland—to convert the Irish medical charities into a rotten borough for the benefit of a few toad-eaters—has failed. We are enabled to assert, on what we believe to be the best authority, that the poor-law commissioners are not to have the direction of the medical charities in Ireland, under the bill which is about to be introduced with the sanction of her Majesty's government. The management of these charities will be placed in the hands of the executive. We are thus, at least, relieved from the agreeable prospect of the tread-mill, presented in the 88th section of Mr. Nicholls' scheme for the further degradation of the profession in Ireland. The poor-law commission might have applied the punishment of felons to the mortal offence of disobedience to their orders; but no European government in the nineteenth century would dare to encounter the odium attached to such an act. We are, therefore, safe for the present. The tread-mill and the commission have disappeared together. They may, however, come forward at another time, and under other auspices. The poor-law commissioners are not so easily beaten; they have been too long accustomed to regard the poor and the profession as proper objects of their tyranny, to give way before a single check; the patronage of some 300 offices, with an expenditure of £150,000 per annum, is too good a thing to be abandoned without a further struggle. We may, therefore, predict with confidence, that an attempt will be made, at some future time, and in a more covert manner, to regain the advantage which has been lost. Mr. Nicholls is, we believe, now in London, for the express object of inducing the government to reconsider their determination of taking on themselves the direction of the Irish medical charities. The mission will fail; but it is no less incumbent on the profession to be on their guard. Some influential member of the Irish Association, or some representative of the profession in Ireland, should be immediately commissioned to watch the movements of Mr. Nicholls in London, and counteract his intrigues. The objects at stake are of high price—the interests of a numerous class of practitioners, and the respectability and independence of the whole profession.

Our attention has been recently directed to the subject of coroner's inquests, by some cases of an extraordinary kind which have occurred within the last few weeks in Dublin and London. Nothing can prove more clearly the deplorable state of medical jurisprudence in this country than the investigations to which we are about to allude, conducted by laymen who know nothing of medicine, and by medical men ignorant of the principles of medical jurisprudence.

If the main object of the coroner's inquest be to ascertain the true cause of death in doubtful cases, it were difficult to say whether justice and science suffered most in the hands of the legal or the medical judge.

On Monday, the 2nd of May, an inquest was held by one of the city coroners, at Winder's Tavern, Amiens-street, Dublin, on the body of Mary Connolly, who was reported to have been killed by her husband on the preceding Saturday.

The witnesses who were examined proved that the husband of the deceased was a man of violent temper, and frequently in the habit of beating his wife; that during a quarrel, which occurred shortly before the woman's death, he was seen to strike her with his fist, knock her head against the foot of the bed, and give her a kick which prostrated her on the floor; and that within a very short time afterwards the woman was found on the bed foaming at the mouth; some salt and water was now given, but she became insensible, and died.

Three medical men were examined by the coroner touching the cause of death, as discovered on post-mortem examination.

Thomas Wright, Esq., surgeon, stated that he went through one of the most minute and laborious dissections he ever made in his life, in order to arrive at the truth, which occupied nearly three hours; deceased had on her head three marks of violence, and a *corresponding injury on the membrane that covers the brain;* the brain itself was sound; there was a small gland in it diseased; that had no connexion with the wound; the wounds on the head were sufficient of themselves to account for death, but would produce stupor, consequent inaction, and probably fainting also. The windpipe and parts about the neck were free from injury. There was a reddish mark on the right side of the neck, but it was not produced by violence. The lungs were perfectly sound. The heart was sound also, but quite empty of blood, as well as all the vessels leading to and from it, a state in which persons dying of syncope or faint

ing fit, it is generally found. The inference he should naturally draw from that circumstance was, that the deceased died in a faint or state of syncope, which would be accelerated, if not actually produced, by her being in that state of fainting placed in an erect position, similar to the position she was placed in when the salt and water was given to her as detailed by the witnesses. The contents of the abdomen were sound. The surface of her body was remarkably pale, and her face was exsanguineous, peculiar to persons who die in a faint. The blood of persons who died very suddenly is generally in a fluid state, but deceased's was not; has known persons die sitting in a chair from over dose of common salts.

In reply to Mr. Curran, Mr. Wright said, "I think the deceased died in a state of syncope by being kept in the erect position after the faint, and having the salt and water administered to her; deceased did not die from immediate violence, but it might have had an indirect effect towards producing her death."

G. W. Hatchell, M.D. and surgeon, was next examined, and corroborated the testimony given by Mr. Wright. He further stated, that the vessels of the brain were completely empty, and would corroborate what Mr. Wright had said—namely, that the deceased died in a fainting state; the exhaustion following from the quarrel with her husband would naturally produce fainting.

William M'Leod, M.D., was examined, and corroborated the testimony given by Dr. Hatchell. He stated it to be his opinion that deceased died in a state of syncope or faint. His opinion was more strongly confirmed by the circumstance of his having seen the deceased two hours after her death, when the surface of her body exhibited that ex-sanguineous appearance peculiar to persons dying from syncope.

The jury, after about ten minutes' deliberation, returned the following verdict:—

"We find that the said Mary Connolly died in syncope or faint, produced by violent excitement, arising from a quarrel with her husband on Saturday last, and from the injudicious treatment she received subsequently, while in that faint, by her neighbours placing her in an erect position, and administering salt and water."

We have abridged the preceding account from "Saunders's News-letter;" it hardly requires any comment.

The next case, or rather series of cases, to which we would refer, occurred in London, and were the subject of a communication from Dr. Wilson to the Medico-Chirurgical Society. We notice some of the leading features briefly, as a full report will be found in another part of the Journal. A colour manufacturer was taken ill on the 1st of January, with griping and purging, which continued until his death on the 20th of the same month. The youngest child, aged two years, died on the 16th. The survivors of the family, consisting of the mother and two children, were admitted into the Middlesex Hospital on the 26th. The symptoms were very obscure. The mother died on the 21st of March; the time at which the other children died is not stated. Post-mortem examination did not throw any clear light on the cause of death, or on the nature of the disease. The society, however, seemed to think that the fatal termination depended on the effects of poison. With this opinion we are much disposed to coincide.

The bodies of the father and youngest child were disinterred by order of the coroner, after the admission of the survivors into the Middlesex Hospital; a chemical analysis, it is said, was made, but no conclusion could be arrived at.

In truth, no other result can follow from investigations conducted after the fashion of coroner's inquests in this country. This we shall make the theme of some observations on a future occasion, our present object being merely to direct attention to certain facts illustrative of the state of medical jurisprudence in the United Kingdom.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

May 10, 1842.

Dr. Seymour in the Chair.

Peculiar Symptoms affecting an entire Family, and terminating in Death. By John Wilson, M.D., Physician to the Middlesex Hospital.

It appears that the family, consisting of father, mother, and three children, were in good health up to the evening of December 30, 1840. On January 1, 1841, the father, Giovanni Arzoni, a Neapolitan, and manufacturer of colours, was taken ill with griping pains and purging, which never ceased till death. He was sick at times, but never vomited; the motions were offensive and black; had frequent cold fits during the day, followed by much fever. The joints from the first were swollen, not red, but so painful that he could not be put into a warm bath. He was considered by the medical man who attended him to be labouring under typhoid fever. He died on the 20th of January. On examination after death, the stomach was found healthy, but slightly discoloured in one part, attributable only to a natural cause; it contained a small quantity of fluid (homogeneous), principally animal matter; intestines healthy; lungs and pleura presented strong evidence of inflammation, *quite sufficient to account for death.* The youngest child, aged two years, died on the 16th of January. On examination after death, there was no morbid condition of any of the viscera but the lungs, and they presented some little congestion only; the stomach and intestines were specially healthy. The above information was obtained from the evidence given at the coroners' inquest; the cases were not seen by the author. On the 26th of January the survivors, the mother and two children, were admitted into the Middlesex Hospital, under the care of Dr. Wilson. The mother, who was about four months advanced in pregnancy, was taken ill on the 2nd of January with a pain in her head, and sleeplessness during the night, and she lost her consciousness. The bowels were affected with severe pain, and there were frequent evacuations, sometimes only of fœtid gas, at others of matter like putrid flesh. Three days after

she lost the use of her limbs, and had pain in the joints. On the 6th day œdema of the feet, legs, and thighs, came on, and the urine was scanty, high coloured, and offensive; water flowed from the mouth which "had a cankery taste." On the 15th of March, she gave birth to a very small infant, which only lived twenty-four hours; she herself died on the 21st of March, labouring under symptoms of puerperal fever.

The details of this case, as well as the cases of the two children who also died in the hospital, are carefully related by the author, to which our limits oblige us to confine ourselves.

In all the three patients the most prominent features of their sufferings were the general soreness of the fleshy parts as well as of the joints, exquisite sensibility of the skin when touched, and the pain produced whenever they were moved or their position changed, according to their so frequently expressed wishes.

Next may be noticed the œdema, and particularly that of the inferior extremities, which was present in all the three; the alkaline state of the urine, when admitted, and their desire for acid drink; the faces of all being pale, haggard, and so care-worn as to give to the children the aspect of aged dwarfs, from their hollow cheeks, sharp features, exsanguined and emaciated bodies. At the same time their appetites were great; that of Mary Ann ravenous. But the mother's never was good; on the contrary, at times it was difficult to induce her to taste even some trifling sustenance. The mother, at different times, was much exhausted by diarrhœa, and both the children suffered from it, but less severely. During their afflictions the intellects of all preserved their integrities; lastly, there was the "cankery" taste of the mother, the "metallic" of the boy, the watery state of the mouth and eyes, in each; the teasing, hacking, dry cough, common to all, and affecting the children particularly towards the last. Then their lying sometimes without any covering, even during the coldest season, when at nights the external atmosphere was 10 or 15 degrees below the freezing point, and their objecting to even a sheet, while their flesh was so greatly wasted, and their lungs became less and less capable of absorbing oxygen, from the gradual infiltration of blood into parts at their vesicular tissue, diminishing proportionally the respirable portions. The death of the mother was accelerated by parturition, and examination after death showed very extensive disease in both the abdomen and chest, yet probably differing considerably from what might have resulted had parturition not occurred, and had she died, like the children, of the affection common to all of them, and not been sooner carried off by a new disease supervening on the original one.

The ulcerations of the sulci of the stomach of the children have been noticed; but they were so slight that, in ordinary cases, they might have been overlooked, without attention having been particularly directed to that organ. Neither the mucous membrane of the intestines, nor other parts of the abdominal viscera, showed any particular change from the normal state.

But the organ by which death finally entered appeared in these two to have been by the lungs; for the blood at last seemed infiltrated into their tissue, rendering portions of them dark, and so heavy as to sink in water, and resembling considerably the state of the lungs of those who died of the spotted fever in 1837, and which I have described as non-circumscribed pulmonary apoplexy, caused by the blood becoming so altered as to escape from its proper vessels into the tissue of the lungs, thus rendering portions of them (as in these) black, and so heavy as to sink in water. Yet these parts were not circumscribed by healthy lung, but they gradually shaded off from the heavy dark parts to the respirable portions.

The author abstains from giving any opinion as to the cause of these deaths.

After the admission of this part of the Arzoni family into the hospital, the coroner caused the bodies of the father and infant to be disinterred, and examined. A chemical analysis was made, and an inquest held; yet no conclusive evidence resulted. So that legal, chemical, and medical investigations, combined, have not been able to unravel the mystery which envelops the cause of death.

A Case in which Pregnancy was unattended with the usual Signs, and in which Parturition occurred without Labour Pains—Rupture of the Funis, which remained untied forty-five minutes. By Thomas Lewis, Esq., Liverpool. [Communicated by Dr. C. J. B. Williams.]

The case was that of a lady, aged 41, who had noticed an enlargement of abdomen for six or seven months. She felt certain she was not pregnant, because she had not experienced symptoms similar to those of her first pregnancy. Catamenia appeared last, eight or nine months ago. External examination not proving satisfactory, examination *per vaginam* was made, which disclosed the nature of the case. The os uteri was dilated to the size of a shilling, the neck entirely expanded, and the membranes and child's head could be felt. Though informed she was pregnant, she was sceptical, and made no preparation for the event.

On January 5 the author was sent for, and found the child born before his arrival: the funis was ruptured about four inches from the umbilicus. It appears the lady had suffered for diarrhœa for two days previous. At one o'clock, a.m., she awoke, she says, with griping pains in the belly; these continued until six, when she got out of bed for ease. She walked into an adjoining room, and, bending herself, rested her hands on the table. Suddenly the waters broke, and the child was expelled, and fell on the floor. She states positively she had no pain in the loins, nor bearing-down pains, previous to the expulsion of the child. The author considers the following facts established by the case:—

1. That pregnancy may occur, and nearly reach its termination, without many of the ordinary signs.

2. That the arteries may contract, like other hollow muscular organs, without the consciousness of the mother.

3. That rupture of the funis is attended with little or no bleeding.

The practical doctrine he infers from it is, that in cases of illegitimate births occurring suddenly, and where the child is found dead, the circumstances should be of a very decided character before the guilt of infanticide be fixed on the mother.

ACADEMY OF MEDICINE, PARIS.

May 17.

LITHOTOMY AND LITHOTRITY.

M. Drouineau read an analysis of a paper containing a complete history of the several operations which he had performed for calculus. Out of 17 cases the operation of lithotrity had been performed 11 times; 9 patients were cured; in 2 lithotrity failed, from circumstances independent of the operation. In 8 cases the disease was of very long standing, and accompanied by considerable disorder of the urinary organs.

In 6 cases, where lithotrity was judged inapplicable, lithotomy was performed. Five patients recovered; the sixth died on the tenth day after the operation.

ARTIFICIAL ANUS IN A CHILD.

M. Amussat presented a preparation taken from an infant who died on the fourth day after birth. The child had imperforate anus, with termination of the rectum in the bladder. On the second day after birth the abdomen became tumefied; he vomited up whatever he took, and the face assumed a livid tinge. The operation was performed on the 7th of May, 1841. Although M. Amussat was unable to detect any fluctuation in the perineal region, he cut down on the raphe, hoping to fall on the intestine, as it entered the bladder. He sought for it, however, in vain, although the incision extended to a depth of two inches. A trochar was now pushed in the direction of the rectum, but without effect; at one time the operator thought that he had arrived at the gut, as he felt a conical body at the bottom of the wound; this was carefully divided, but nothing escaped. It was now thought prudent to suspend the operation; a piece of lint was introduced between the edges of the wound; and although careful examination was made from time to time, it was impossible to discover any appearance of the intestine. The child died on the second day.

After death the rectum was found considerably dilated; it terminated at a right angle in the bladder, between the ureters, by a narrow canal, which merely admitted the most fluid part of the meconium. The large intestine was very much distended, and it was easy to see that the colon on the left side was fixed to the wall of the abdomen, and not covered posteriorly by peritoneum for a third of its length. It results from this that we can open the colon in the lumbar region without danger. In children, moreover, the kidney is placed on the inner side of the colon, in the left lumbar region, and thus serves as a sure guide to that part of the intestine which is free from peritoneum. In adults this does not exist.

M. Amussat concludes that the operation through the perineum should never be attempted except when fluctuation can be distinguished through the skin.

The author took this opportunity of acquainting the academy that the child on whom he operated for artificial lumbar anus some time back continued to enjoy excellent health. The child was now four months old.

M. Jules Guerin, editor of the "Gazette Médicale de Paris," has been elected member of the Royal Academy of Medicine.

MANCHESTER EYE HOSPITAL.

[*Practice of Mr. Walker.*]

INJURY OF RIGHT EYE—SYMPATHETIC OPHTHALMIA OF THE LEFT—COMPLETE LOSS OF VISION—RESTORATION BY OPERATIVE MEANS.

Mary Brown, in February, 1839, being then six years of age, received a severe lacerated wound of the right eye from a piece of slate, which had been thrown with considerable force from a short distance. She was brought to the hospital in a day or two after the receipt of the injury, when, on examination, a wound was discovered extending across the centre of the cornea and part of the sclerotica at the external canthus. The pupil was obscured by an effusion of blood into the anterior chamber. She complained of much pain in the eye, and vision was entirely lost. The eyelids were approximated and kept together with strips of adhesive plaster, and the usual precautionary treatment was advised. The wound healed and the eye had got into a tolerably quiet state at the end of about six weeks, but vision was destroyed and the organ rendered atrophic.

It was not until after six months had elapsed that the patient began to complain of the *left* eye. Symptoms of inflammatory action were then developed: these, however, were never of an intense character, but the pink zone, the discoloration of the iris, the fixed and contracted state of the pupil, and the gradually extending opacity of the capsule of the lens, ultimately terminated in an almost total loss of vision, notwithstanding the prompt employment of the usual remedies, especially leeches, mercurials, belladonna, and counter-irritation. She had occasional relapses of inflammatory action, so that it was not until the spring of the year 1841, and two years from the receipt of the injury, that it seemed proper to propose an operation.

July 17, 1841. At this period she had been free from inflammatory attacks for several months. The sclerotica and cornea had both an healthy aspect, and the anterior chamber was of undiminished size, but the condition of the iris, and that of the pupil and capsule of the lens, remained as before described. She had a very small amount of vision, being only able to discern a lighted candle or some luminous or brilliantly coloured object. As there appeared reason to hope that the retina retained a certain degree of sensibility, it was deemed advisable to give her the chances of an operation.

A puncture was accordingly made at the inferior margin of the cornea with an extraction knife, the point of the instrument being carried into the pupil so as to perforate the capsule and facilitate the exit of the crystalline lens. The scoop was next introduced through the wound into the pupil, and the opaque body, which was simply the thickened capsule (the lens having been evidently previously absorbed), was readily removed. The eyelids were then closed, and kept in apposition by means of the plaster dressings. A slight attack of inflammation succeeded, and was several weeks before it entirely subsided, when the pupil, which was drawn somewhat down towards the wounded part of the cornea, was found closed by either a portion of capsule which remained, or, more probably, by an adventitious membrane, the product of the inflammatory action. No improvement to vision had hitherto resulted.

Nov. 6. All irritation from the previous operation having long since subsided, it was agreed to proceed to the formation of an artificial pupil. The alarm and unsteadiness of the girl seemed to forbid the attempt at removing a portion of iris by excision. Accordingly, the iris knife was passed through the sclerotica, and, having perforated the iris, appeared in the anterior chamber; the instrument was then made to cut through the opaque membrane and adjoining portion of the iris, leaving a tolerably clear, though somewhat irregular, pupil. The eye was then dressed in the usual manner.

9. The dressings having been removed, the lower portion of the eyeball, near the site of the puncture, was observed to be very vascular; the opaque membrane was no longer visible; the pupil appeared of moderate size, of an oval shape, and situated near the centre of the iris, but was evidently occupied by some effused matter. She had a very strong sense of light, and could observe the black marks on some writing paper held before her. There had been no pain in the eye since the first day after the operation. The dressings were reapplied, and a purgative ordered to be taken occasionally.

13. Had gone on favourably since last report; there was less vascularity, and no uneasiness about the eye; the pupil looked somewhat clearer, but was still occupied by effused matter, which had probably become organised; vision had not improved; the same treatment was continued.

After this time the inflammatory action soon subsided, and it became evident that some further operative proceedings would be required before any useful vision could be expected. It was thought advisable, however, to give time to enable the eye to recover itself, and accordingly another operation was deferred until the following spring.

April 9, 1842. There had been no undue amount of vascularity about the eye for some time past. The general appearance of the organ continued favourable, there being no opacity of the cornea, except at its lower margin, the site of the former incision; the sclerotica still maintained a healthy aspect, and the iris had not undergone any material change, the pupil being still obliterated or occupied by some effused and organised matter.

This day the cornea was punctured at the lower margin with an extraction knife, and a small iris hook introduced through the wound into the centre of the iris and former situation of the pupil. A portion of iris was then endeavoured to be drawn out by means of the hook, but its texture, or perhaps rather that of the organised deposit, was so fragile, that it tore through, leaving, however, an aperture of ample size and nearly in the usual situation of the pupil. She was able immediately to discern the persons of those around. The eyelids were then secured with strips of plaster in the usual manner.

12. On the removal of the dressings but little increased vascularity was observable; the incision had apparently healed; the pupil remained open, of an oval form, and of about the medium size. She could readily discern objects around. The dressings were renewed, and the usual treatment recommended.

16. Proceeding very favourably. She had suffered no pain in the eye, and the vascularity was trifling. The pupil continued open and of undiminished size; a small portion of opaque matter occupied its lower margin. Vision remained fully as good as before.

May 7. The eye had now completely recovered from the operation. The pupil remained open, of good size, and situated nearly in the centre of the iris. She was supplied with a powerful convex lens, which increased her powers of vision very materially, and was discharged well satisfied with the result and in excellent spirits.

Instances of restoration of vision, after an attack of sympathetic ophthalmia, are extremely rare. Hence this case possesses an unusual degree of interest. Dr. Mackenzie states that he has never met with an instance in which vision was regained. If this be the rule, the present case forms an exception. Perhaps the most important peculiarity is the length of time which elapsed between the receipt of the injury and the development of the sympathetic ophthalmia. Possibly this may account for the milder character of the attack; usually a much shorter interval is found to succeed.

QUALIFICATIONS FOR UNION MEDICAL OFFICERS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I have been much surprised at the apathy of the general practitioners, who commenced their professional career previous to the passing of the Apothecaries' Act of 1815, in regard to the regulations lately issued by the poor-law commissioners.

I am one of that class. I am neither a member of the Royal College of Surgeons in London, nor a licentiate of the Society of Apothecaries, but have been pursuing the even tenor of my way for upwards of thirty years. The first-mentioned qualification I never attempted to obtain, for this very simple reason, that I was not then aware, nor am I yet, that it confers any legal right but what any other regularly educated man possesses for country practice, with the exception of its members being eligible for the surgeoncy to prisons; and, viewing it as an honorary distinction alone, it was for my consideration whether to be at the expense of twenty-two pounds, and undergo the anatomical and surgical examination at the college, or not, for what might probably never be of twenty-two pence service to me.

The second-mentioned qualification does not apply to me. During the period I was a pupil at the Borough hospitals, and several years afterwards, the present Apothecaries' Act had not been obtained; and though I was actively engaged in that business (being deputed to act for my professional brethren in my own neighbourhood at the district meetings), the expense and trouble of passing became unnecessary, by an exception being made in favour of those who were in practice at the time.

Having said thus much of myself, I proceed to make some observations upon a letter, at page 57 of your last Number, signed "A Medical Officer," who tells us, *en passant*, that he possesses the double qualification, with nearly twenty years' experience.

Your correspondent says that the guardians, under the new Poor-law Act, will not feel disposed to carry

into effect the order of the poor-law commissioners, unless compelled so to do, before the expiration of another year, and that upwards of 200 illegal practitioners will be again employed for another year, and that some of his parishes have been taken from him for the purpose of making way for a person who has no qualification of any sort or kind, save the qualification of being related to two or three of the guardians, and who, until a short time before, had only acted as a dispenser or assistant, &c.

In the first place, I must demur to the title of illegal practitioner being applied to surgeons not possessing the double qualification. I should very much wish to be informed in what respect do these act unlawfully if they discharge their duties properly.

In the second, respecting his rival, neither the boards of guardians nor the poor-law commissioners can legally employ a person who is not a regular apothecary, as defined by the Apothecaries' Act; and, on that account, the five qualifications stated by the poor-law commissioners cannot be acted upon unless the boards of guardians will employ a physician, and also employ some one else to supply the medicines; for the regulations of the College of Physicians prohibit the licentiates from dispensing or entering into any compact with pharmacopolists.

Viewing the new qualification clauses of the poor-law commissioners, I should say that they appear to have been arranged by a selfish member of the Royal College of Surgeons more than by any other person, for the commissioners can have no motive to produce jealousy and confusion in the medical ranks; and, from what I have had to do with them in my professional capacity, I have always found them act with courtesy and honour.

I am, Gentlemen,

Your very obedient servant,

A Yorkshire Practitioner.

April 25, 1842.

P.S.—I would just observe that, in the union where my residence has been upwards of thirty years, there are twenty-seven regular medical men; only thirteen of them are members of the College of Surgeons; and if this be the fair average throughout England and Wales, it is not difficult to foresee the confusion which the poor-law commissioners' qualification clauses would produce if acted upon.

MEDICAL REFORM.

[The following memorial has been addressed to Sir James Graham by the Gloucestershire Association.]

"*To the Right Hon. Sir James Graham, Bart., Secretary of State, &c. &c.*

Sir,—I am instructed by the Gloucestershire Medical and Surgical Association to express to you their thanks for the announcement of the intention of her Majesty's government to bring forward a bill for the better regulation of the medical profession.

We respectfully represent that no measure can be regarded as a final and equitable settlement of this important measure which will not afford the community an effectual protection against the arts of unqualified and ignorant pretenders; and that merely to deprive such persons of the power of recovering charges for medical attendance and advice will prove totally insufficient to remedy the evil now so increasingly prevalent.

And we beg to suggest that the penalties to which illegal practitioners are now liable, would probably prove efficient, if a mode of conviction were adopted, less expensive and protracted than the present process by action at law; and, also, if the law were made to apply to all branches of medical and surgical practice.

I am also instructed to submit that, in order to provide the community with a body of fully qualified medical attendants, a uniform primary qualification to be tested by a sufficient examination in medicine, surgery, and midwifery, should be required of every future practitioner, who, on obtaining such qualification, should be at liberty to exercise his profession in any part of her Majesty's dominions, to take higher diplomas or degrees in medicine or surgery, and to attach himself to any particular department of practice which he may prefer.

And, finally, very respectfully to urge the adoption of the representative system in the election of the councils or governing bodies of the Royal Colleges of Physicians and Surgeons.

I have the honour to be, Sir,

Your respectful and obedient servant,

John W. Wilton,
Honorary Secretary to the Gloucestershire Medical and Surgical Association."

Gloucester, May 12, 1842.

INSTRUCTION AT LUNATIC ASYLUMS.

The following extract, from the Eighteenth Report of the Gloucester Lunatic Asylum, is worthy of attention:—

"During the past year the visitors have made a great addition to the comforts of the patients, and they trust a grand step towards a public benefit, by commencing a system of receiving into the asylum a limited number of officers of both sexes, in the double capacity of *assistants and students*, who do not entail any expence upon the establishment, whilst they devote the whole of their time and energies to its business. Those of the male to be medical gentlemen who have completed their professional education; and those of the female, young ladies of good education and manners, and both required to remain twelve months in the asylum. They reside constantly with the patients, head their tables, join in their excursions, promote their amusements, arrange their difficulties, and act in all things as their friends and advisers. By their means the objectionable, but previously unavoidable, services *of keepers of both* sexes, belonging in fact to the class of menial attendants, will be done away with, and they will be reduced to their proper position as *servants* in attendance upon persons afflicted with ill health. This system has been commenced, and as far as such officers have been appointed, has proved very satisfactory. The visitors have likewise during this year sanctioned, in fact, but not as a universal regulation, the *total disuse* of all mechanical restrictions on the persons of the insane; they have also allowed the introduction of *female attendants* to a

share in the management of, and providing for, *the male patients*. It has ever been the practice of the medical officers to use as little restraint as was deemed compatible with the safety of the patient, or the protection of those about him; but they admit with the visitors, that up to this time, *all the patients* are *as securely* managed, and are governed with *much less difficulty and disturbance*, WITHOUT than WITH mechanical assistance.

From the causes above-named, and perhaps from others not at once cognizable, the asylum has during the past year exhibited a vast increase of good order and comfort. The exercising grounds, formerly scenes of occasional riot and confusion, with indications of mischief and destruction scattered on all sides, are now laid out as vegetable and flower gardens, and planted with fruit trees. To these all the patients, of each class and sex respectively, have constant access, and yet the productions of each are permitted to flourish, and their fruits to attain maturity. With the simple arrangement on the part of the superintendent, that whatever the patients will cultivate and protect shall be their own, and shared amongst them, and that those who irregularly or furtively misappropriate any portion shall be deprived of their share at the time of distribution, nearly the whole produce of each garden was this year brought to maturity, and partaken at the tables of the patients who had raised them.

Balls and other amusements, occurring in lunatic asylums, have been of late publicly mentioned as matter of admiration and astonishment. In this asylum, large parties for dancing have always been promoted; as well as dinner and evening parties, when proper, and pleasurable excursions, for many hours, in the country. Musical entertainments within the walls, and attendance on public amusements, are of so frequent occurrence, that they constitute the practice rather than form the occasional source of astonishment in this asylum. Indeed, to so great an extent does our superintendent endeavour to make his patients feel that they belong to the great community of mankind, and are only temporarily separated for their health's sake, that he encourages a great proportion to attend to their religious duties, on Sundays, in the places of worship in the city and neighbourhood; and induces all who can or will separate themselves from the asylum, to take their exercise in the surrounding country; whilst, to give encouragement to those who are inclined to be industrious, he employs all he can, *without* the walls, in various ways, and cultivates nearly twenty acres with the spade in the fields adjoining and belonging to the asylum, with scarcely any other check upon their escape beyond the good feeling subsisting between himself and them."

There were, on the books December 31, 1840, 223 patients; admitted during 1841, 124; total, 347. Of these were cured, 78; relieved, 1; removed, 12; died, 23; remaining in the house on December 31, 1841, 233. Of the deaths, 3 were above 70 years of age, one dying on admission; 6 were above 60, and many years insane; 6 epileptics; 2 consumptive, one dying on admission; 1 fever, with delirium—an improper case; 5 paralytic and fatuous, three in a dying state on admission. Total, 23.

SOLUTION OF CALCULI.

Dumas some years since proposed to attack the calculus by introducing the poles of the galvanic battery—one into the rectum, the other into the bladder. The form of battery then in use occasioned severe shocks, and was moreover of little decomposing power. We are now in possession of far superior instruments, effecting powerful decomposition without occasioning pain to the most sensitive organ. Still the proposal seems unpromising, from the very great difficulty with which *solid* substances undergo decomposition. In numerous experiments made by the editor of this work (Dr. O'Shaughnessy), calculi were exposed to a powerful and constant current for several days without any practical diminution of their weight. The apparatus used was a glass cylinder closed at one end by a membrane, and placed in a vessel containing urine, which was frequently renewed. A plate of platinum was inserted in each vessel, and connected with a 12 plate battery. The urine in contact with the calculus could thus be rendered acid or alkaline at pleasure, still without the desired effect being obtained.—*Bengal Dispensatory.*

PRESENTATION OF PLATE.

The Committee of Officers of the Medical Department of the Army, appointed for the purpose of expressing to Mr. Guthrie their sense of the kindness and liberality with which he had placed his lectures and hospital instructions at their service for many years, delivered to him on Tuesday, the 10th of May, a service bearing the following inscription:—"To G. J. Guthrie, Esq., F.R.S., &c. &c. &c. this service of plate has been presented by three hundred officers of the medical department of the army, the companions of his early military services, or the pupils of his instruction. They desire to record by it their high sense of his liberal and distinguished conduct on every occasion, as well as to express their sincere affection and esteem."

POOR-LAW MEDICAL RELIEF.

At a recent interview between the poor-law commissioners and a deputation from the British Medical Association, the latter were informed that the commissioners had full power to enforce obedience to their late medical order, and were resolved on so doing. On the qualification clause they could not make any change. On two other important points—viz., the want of some mode of calculating medical salaries, and the want of medical superintendence, the deputation were only able to obtain very vague information from the commissioners.

MEDICAL ASSOCIATION AT BRENTFORD.

(From a Correspondent.)

We are happy to hear that the medical practitioners of Brentford and its vicinity have resolved to form themselves into an association for the purpose of friendly intercourse and mutual advantage, to be called the "Brentford Medical Association." It will include all practitioners resident in the Brentford Union.

RETROSPECT OF THE MEDICAL SCIENCES.

IMPERFORATE HYMEN.

Mr. Arnott had recently an interesting case of this not very common malformation under his care in the Middlesex Hospital, in the person of a girl about eighteen years of age. She was admitted for inability to pass water; was in great pain, with a distended and tense abdomen, tender on pressure. On examination, a tumour was discovered in the umbilical region, and extending above it, solid, and somewhat movable, and of the size of an orange. It struck Mr. Arnott, from its somewhat triangular shape, being larger above than below, that it might be uterus, and on learning that the girl had never menstruated, he immediately put his finger between the labia, in the direction of the entrance of the vagina, when its progress was stopped by a bulging, smooth swelling there, which proved to be the imperforate hymen distended, and protruding in size and form like that of half a hen's egg divided longitudinally, and placed lengthways between the orifice of the urethra and the perineum. The membrane was red, smooth, and fleshy; the swelling firm, but elastic to the touch. It was opened first transversely, then vertically, and as soon as the bistoury penetrated, the retained menstrual fluid spouted forth in a stream, and continued to flow freely until thirty-six ounces had escaped. A draw-sheet was then placed under her, and changed three times. From fourteen to sixteen ounces more, it was calculated, drained away from her. This enormous quantity, in Mr. Arnott's opinion, was contained in the distended and lengthened vagina, its increased length forcing the uterus up to and above the umbilicus. The patient can scarcely be said to have had a bad symptom after the operation. The use of bougies was requisite afterwards to keep the aperture patent.—*Lancet.*

INFANTICIDE.

Mr. Taylor has published a medico-legal report on a case of infanticide, which occurred in 1840 at St. Albans, and in which a former pupil of his, Mr. John Coales, was concerned. The child, a female, had evidently attained maturity, and had perished by strangulation. It was twenty-four inches in length, its weight a little more than eight pounds. The middle point of the length of the body was rather above the umbilicus. The circumference of the thorax was thirteen inches. The fingers were firmly clenched, the nails blue, the mouth open, and the tongue large, dark, and protruded. There were several true ecchymoses about the face and scalp. On removing the towel, by which strangulation was effected, and which was passed three times round the neck, drawn excessively tight, and tied in a knot behind, the neck was found very much compressed, the larynx and trachea quite flattened, and the whole neck squeezed into a remarkably small compass. There were deep marks produced by the folds of the towel, with little ridges corresponding to the furrows of the folds. There was little or no ecchymosis; the ridges just mentioned were rather red, the other parts of the skin being quite pale and white. There was a strong line of demarcation between the red and white portions, corresponding to the upper edge of the towel. There was not any blood in the blood-vessels of the neck, where the napkin was applied, but the jugular veins just above were quite full. The lungs completely filled the chest, and overlapped the pericardium, and completely covered the arch of the diaphragm. The edges were obtuse and rounded, and clusters of cells, distended with air, could be perceived all over the surface of the lungs. The heart was healthy and natural, the right cavities gorged with fluid blood. The lungs, heart, thymus gland, and trachea, were removed altogether, and placed in clean soft water at 60°. The lungs floated, completely carrying the heart and the organs attached with them. About one-fourth of the surface of the lungs appeared above the level of the water. The brain was congested. From these facts, the surgeons considered that the child had arrived at maturity, had been born alive, and was destroyed by strangulation soon after its birth. The jury, however, acquitted the mother, finding her guilty of the minor offence, concealment of the birth, for which she was sentenced to two years' imprisonment.

In pursuing this important investigation, Mr. Taylor performed a series of experiments on the dead bodies of newly-born infants, some of which had respired after birth, others had been still-born. The experiments were fifteen in number, including several instituted by Dr. Geoghegan, and had reference chiefly to the signs of maturity, the relative weight of the lungs and body, the hydrostatic test, the state of the ductus arteriosus, the foramen ovale, the umbilical cord, &c. From the results furnished by this investigation, he comes to the conclusion that Ploucquet's test, depending on the relative position of the lungs compared with that of the body, is not even capable of furnishing corroborative proof, and that it would be unsafe to rely upon it. He adds, that in a paper published in the "Edinburgh Medical and Surgical Journal," Dr. Guy has come to a similar conclusion, from an examination of cases, derived partly from his own experience, and partly from that of others. The average weight of the lungs before respiration, the child having arrived at or near maturity, is 649 grains; after respiration, 927 grains, supposing the process of breathing to have been perfectly performed. This increase in weight after birth is commonly ascribed to the altered course of the blood under the establishment of the respiratory process, and to the fact that more blood circulates through the lungs after than before respiration. In an earlier communication, Mr. Taylor published certain conclusions which he had drawn from experiments then made with respect to the artificial inflation of the lungs, which were afterwards confirmed by Mr. Jennings, of Leamington. He was then of opinion, that in artificially inflated lungs the air might be forced out by compression, where the pressure was applied not to the entire, but to the divided lung. This experiment had succeeded in all cases, even where the lung had been violently inflated after removal from the thorax, though in this case it was a difficult process, and required several repeated compressions. The air might in like manner be forced out of lungs which had imperfectly respired, and as these did not differ in weight from the fœtal standard,

there were no means of distinguishing artificial inflation from imperfect respiration in newly-born infants. When respiration had been perfectly established, the air could not be forced out by compression without entirely destroying the structure of the organ. The result of more recent inquiries has, however, led him to be less inclined to depend on this test of compression; he says it is too uncertain to allow of its applicability to the extent which previous experiments would have justified. The force of the legal objection, respecting artificial inflation, clearly consists in the degree given to the lungs, *in situ*, of a still-born child, where the air is propelled for the purpose of resuscitation, a task of exceeding difficulty, as is well known; the greater the violence used, the less likely is the air to pass into these organs, but it rather finds its way through the œsophagus into the stomach and bowels. Any attempt at inflation can be readily distinguished from perfect respiration, by a practitioner acquainted with the subject, but there are not any means by which it can be recognised from imperfect or feeble respiration.

Chaussier gives as a sign of maturity that the opening for the umbilical cord corresponds to the centre of the length of the body; but the cases brought forward by Mr. Taylor would rather show that the umbilicus is from a quarter to half an inch below the centre in infants arrived at maturity.

Among the signs of the birth of a living child is mentioned the presence of a circle of redness at the junction of the umbilical cord with the skin of the abdomen; but this criterion is not a perfect one, for in five of the cases described by Mr. Taylor, all of them still-born children, the red circle was found; while cases have occurred of living children born without it. The contraction of the ductus arteriosus has been usually considered a positive evidence of live birth, although it strictly depends on the degree of respiration established. Dr. Geoghegan, in two cases of still-birth, noticed a slight contraction about the centre of the vessel; but this is a point, in Mr. Taylor's opinion, requiring further investigation. He has never met with any alteration in its calibre in bodies where respiration has not taken place.—*Guy's Hospital Reports.*

DIABETES MELLITUS.

It was at one time supposed that the sugar found in the urine in diabetes was produced by disordered action of the kidneys, but this supposition has been disproved lately by the discovery that sugar exists in the blood likewise. Its existence in that fluid was stated by Dr. Rollo in the last century, and it has since been confirmed by Dr. Maitland, Dr. Christison, Mr. Macgregor, M. Bouchardat, &c. The quantity found in some cases is exceedingly small, varying with the time when the blood was drawn, that taken soon after digestion containing the greatest quantity. Another fact recently discovered by Mr. Macgregor, and supported by the experiments of M. Bouchardat, is, that in diabetic patients sugar is found in abundance in the stomach during the process of digestion, and may be detected by fermentation or crystallisation, in matters vomited after digestion has commenced, thus completing the chain of evidence by which chemistry has thrown so much light on the pathology of diabetes. A great quantity of sugar also passes off by the bowels, and some, in all probability, by the other surfaces. It is quite clear, then, that the sugar in diabetic urine is not formed by the kidneys, but merely eliminated by them, and since the urine is otherwise healthy, it cannot be looked upon as a disease of those organs, which, anatomically speaking, are found even under the microscope to be perfectly healthy in some cases.

The quantity of sugar formed in the stomach is, as might have been anticipated, very much increased by a vegetable diet. It has been long known that, under such a diet, the quantity of sugar in the urine has been much increased, and all the symptoms of diabetes are much aggravated; and, on the other hand, that by restricting the patient to a diet consisting exclusively of animal food, or of aliment not easily convertible into sugar, the quantity of sugar in the urine is immediately reduced, and the progress of the disease stayed.

From all these facts it would appear that, in accordance with the theory of Dr. Prout, who is justly regarded as a high authority in these matters, the primary cause of diabetes is the loss of power in the stomach to assimilate the sugar generated in it, from the saccharine principles taken as food, and which is consequently carried undigested into the blood, whence it is eliminated by the kidneys, where its presence as a foreign body acts as a constant irritant, exciting and sustaining the excessive diuresis, so generally regarded as characteristic of the disease.

Two objects require attention in the treatment of this disease; the first to strengthen the digestive and assimilative functions, in the impairment of which the disease seems essentially to consist; the second, to prevent, as far as possible, as long as the depraved digestion continues, the formation of sugar in the stomach, which seems to be the source of most of the other evils. The first indication we have but slight means of fulfilling; freedom from the harassing cares of business, change of air, especially where the patient has resided in an unhealthy or malarious district, or a short sea voyage, with the observance of obvious hygienic rules, are those most available. The other indication is best attended to by the exhibition of proper diet, that food being selected which contains least woody fibre, gum, or starch. An exclusive animal diet is the best that can be adopted, because although the gelatine passes into sugar by the influence of various chemical agents, it does not do so so readily as starch. Patients, however, will not be so restricted; after a few days of such diet the craving for some vegetable food becomes so intense, that no fear for the future will deter the patient from indulging in it. The use of gluten bread, from which a large portion of the starch has been removed, may, under such circumstances, be permitted.—*Dr. Budd, in Medical Gaz.*

IODURET OF POTASSIUM IN SYPHILIS.

M. Chomel has a high opinion of the use of this ioduret in the treatment of constitutional syphilis. In a case of exostosis of the cranium, attended with severe pain and suffering exacerbations at night, evidently depending on a syphilitic origin, the ioduret was administered, and in less than a fortnight the pains in the head were gone, the exostosis diminished in size; a perfect and lasting cure was the result of a month's treatment. M. Chomel mentions a case in which the effects of this salt were more remarkable. A lady from the country, to whom her husband had commu-

nicated the venereal disease, and who had been inefficiently treated with mercurials, had exostoses on the cranium and elsewhere, and suffered severely. She came to Paris, and placed herself under the care of Chomel, who gave her pills containing the bichloride of mercury for three or four months; under this treatment she improved for a while; the nodes diminished in size, and her other symptoms were also better; but the change was not lasting; the nocturnal pains returned with increasing violence. The ioduret of potassium was then had recourse to, and continued for some time, and with such success, that at the end of a few months the lady returned home, still, however, persisting in the use of the medicine, gradually diminishing the dose. In this case the cure has been complete and permanent. Chomel considers the ptisane de Feltz, a composition containing sulphuret of antimony and a little arsenic, of equal value with the ioduret of potassium in the treatment of inveterate syphilis, but he prefers the latter, many persons not being able to take the ptisan or to persevere in its use, while, on the contrary, the ioduret is easy of administration, and does not require any preparation.—*Bulletin Général de Thérapeutique.*

EXTRA-UTERINE PREGNANCY.

A woman, 70 years of age, was admitted into the Hospital Cochin, under the care of M. Blache, for an abdominal tumour, which she had had for thirty years. The tumour, which occupied the left iliac fossa, was large and hard; it had latterly become very painful; the abdomen was tense, and painful to the touch; and the lower extremities œdematous. She died of peritonitis in September last. On examination of the body, the tumour was found to consist of the remains of a full-grown fœtus, almost all the bones being connected together by incomplete ligaments, and forming a complete skeleton twisted on itself. The pelvis and lower extremities were the back part of the tumour, the occiput in front. The head constituted at least two-thirds of the whole mass. This poor woman considered that this tumour showed itself when she was forty years old; she ceased to menstruate at fifty, having previously borne one child at the age of seven and twenty.—*Ibid.*

HÆMORRHAGE FROM POLYPUS UTERI.

Cases occasionally occur in which the existence of polypus uteri is not recognised, and the hæmorrhage which follows being frequently repeated, exhausts and wears out the patient. Local and general astringents are unavailing. If, at this period of the case, its nature is better understood, and the presence of the polypus is discovered, it becomes a question whether it should be removed. M. Lisfranc says that the greater number of polypi of the uterus are white and fibrous, containing a very small quantity of blood vessels in their interior, but they are covered with a species of mucous membrane, forming a complete vascular net-work, whence, according to him, proceeds the hæmorrhage. If the polypus is very low down, he seizes this membrane with the thumb and index, pinches and tears it, and, in fact, completely skins the polypus. If situated too high up, he introduces the largest speculum possible, draws it downwards with hooks, sponges it, injects cold or aluminous water, and then cauterises the whole extent of the polypus with the proto-nitrate acid of mercury. In either case the hæmorrhage is at once stopped. By these means the loss of blood is arrested, and the patient enabled to get strength to undergo the necessary operation afterwards.—*Ibid.*

USE OF DRASTIC PURGATIVES.

Two cases are recorded in the "Bulletin Général de Thérapeutique," in which the continued use of drastic purgatives cured obstinate cutaneous diseases. The first, a poor, aged woman, who had been troubled with prurigo for upwards of two years, and had been under the care of a medical man, who had directed venesection, alkaline drinks and baths, milk diet, changed afterwards for as generous diet as she could procure; lotions prepared with bitter infusions; and finally, sulphur ointment, from all of which she derived only temporary benefit; was at last ordered by another practitioner to take the tartarised antimony, two grains for a dose. The first not producing any effect, she repeated it of her own accord, when its use was followed by free and abundant stools, but no vomiting. Relief following, the dose was repeated every eight or ten days, the same purgative effect being caused, and the disease gradually disappearing. At the end of three months the patient was cured. The subject of the second case was a woman, fifty-six years old, a patient of Andral's, at la Charité, who was cured of psoriasis by repeated doses of German brandy, a drastic cathartic, composed of jalap and scammony infused in brandy, which equally produced frequent and abundant evacuations. Mention is made incidentally of another patient of Andral's, who, while labouring under a severe attack of angina tonsillaris, was ordered a powerful cathartic, which produced more than sixty stools, the pulse falling from 104 to 76, and the patient was cured.

TRICHIASIS.

M. Alessi considers there are three different varieties of trichiasis, dependant on peculiar causes, each variety requiring special treatment. The first is owing to a relaxation of the skin of the eyelids, and is most frequently the result of chronic ophthalmia. To remedy this, he recommends cauterising, according to Heling's plan. The second variety of inversion of the eyelashes is caused by a deviation of the bulbs, the result of superficial abscesses or pustules formed along the edge of the tarsus, the cicatrising of which has effected a change in the situation of the bulbs. M. Alessi in this case advises the excision of the edge of the eyelids, together with the bulb, taking care, in case both eyelids are affected, that the operation be not performed on both at once, lest a troublesome ankylo-blepharon be the result. The third cause is a shortening of the tarsal cartilage, following its softening from suppuration of the meibomian glands. For the cure of this variety, M. Alessi recommends an operation somewhat similar to that for ptosis—to wit, the dissection of a portion of the skin of the palpebra, sufficient, when the tarsus is brought in contact with the edge of the incised integuments, to cause eversion of the tarsus, in addition to which he incises the conjunctiva from within outwards, so as to separate its connection with the cartilage, and then brings the lips of the external wound together with sutures.—*Il Filiatre Sebezio.*

The Governors of the Gateshead Dispensary met on Tuesday, in the town-hall (George Sowerby, Esq., mayor, in the chair), to elect a house-surgeon and apothecary in the place of Dr. Tinniswood, resigned. The Mayor proposed Mr. Thomas Common, and Mr. Kell, considering him in every respect qualified for the office, seconded the nomination. No other candidate being nominated, Mr. Common was unanimously elected. Mr. Swinburne proposed a vote of thanks to Dr. Tinniswood, for his able, assiduous, and humane performance of the duties of his office. Alderman Pollock seconded the motion, and it was carried unanimously. Dr. Tinniswood having returned thanks, the meeting separated. [One of the candidates for the vacancy, a resident in the West of England, describing himself "a member of the Royal College of Surgeons in London, and a licentiate of the Apothecaries' Company," had the liberality, in his letter to the honorary secretary, to make the following offer:—"If (said he) you can render me any assistance, so as to secure my election to the office, I shall very cheerfully give you twenty or thirty pounds for the trouble I may give you!" We ought perhaps to state, for the information of readers at a distance, and in justice to the successful candidate, that *he* was not the person who made the impertinent offer.]—*Gateshead Observer*, May 28.

OBITUARIES.

At Worthing, Jeremiah Gladwin Cloves, M.D., aged forty-nine.

On the 16th instant, at Jersey, Mr. H. F. Dove, M.R.C.S.

On the 26th, W. M. T. Dyer, Esq., Coroner for the Tower of London.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted on Friday, May 20, 1842.

Edward Neve Sison, John Southern, James Douglas, W. Grant Eaststaff, Nathaniel Montefiore, Michael Hare, Charles Gibson, Arthur Browne Steele, Henry Thomas Berry, Edward Pye, Peter Brotherston, Arthur Taylor, Charles Robison, James Rowlands.

Monday, May 23, 1842.

Octavian Royle, Charles Price Symonds, Alfred George Field, William Malichi Burke, Major Ainger, John Jeffes Sparham, James Green, Alfred Anderson, Henry Uwins, Francis Bryant Pearce, James Thomson Waller, George Augustus Shelton, John Ward, Edward Allen.

APOTHECARIES' HALL.

Licentiates admitted Thursday, April 28, 1842.

P. P. Lattey; W. Davies, Gloucester; J. W. Davies, Gloucester; W. Miller, Poole; J. Thomas, Llanfaid, Cardiganshire; G. A. Eddman, Addethorpe, Lincoln; W. Williams, Mold, South Wales; W. P. Stiff, Uley; J. Graham, Brampton; P. M. Pope, Town Malling, Kent; F. Ingoldby, Louth, Lincolnshire.

Thursday, May 5, 1842.

G. W. Whateley, Great Berkhamstead, Herts; E. Metcalfe, Foulmine, Cambridgeshire; C. W. Mann, Killington, Yorkshire; W. Druitt; M. M. Bull, Cambridge; W. C. T. Wagstaffe, 117, Long-lane, Bermondsey; John Kilshaw Slater, Knutsford, Cheshire; B. Kingdon, Ryde, Isle of Wight; H. P. Haydon, Melbury Abbas, Dorset; B. T. Hodge, Sidmouth, Devon; R. Boley, Bristol; F. M. Russell, Marlborough, Wilts.

Thursday, May 12, 1842.

T. R. Wheeler, 61, Gracechurch-street; W. R. M. Griffin, Falmouth; W. A. Leslie, Falmouth; T. Godfrey, Oxford; J. G. Treacher, Borneo; J. Nicholson, Hexham; J. Walmsley, Liverpool; R. S. Donnall, Falmouth; W. H. Sims, Birmingham; A. Back, Norwich; S. K. Scott, Wappenham, Northampton; G. M. Humphry, Sudbury, Suffolk; W. B. Tomkin, Witham, Essex; E. F. Mecey, Newbury; H. W. P. Davis, London.

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TO CORRESPONDENTS.

Z.Z.—It is impossible for us to make any arrangements which would ensure regular reports of cases from the provincial hospitals. In the numbers of the "Provincial Medical and Surgical Journal" will be found many valuable reports from the Royal Berkshire Hospital, the Leeds Infirmary, Newcastle-on-Tyne Infirmary, Bristol Hospital, &c. We trust that the medical officers of other institutions will, in time, contribute their share to the diffusion of knowledge through the medium of our pages.

In onr next number we shall publish a paper on "the Evolution of Light in the Living Human Subject," by *Sir Henry Marsh, Bart.*

The communications of Mr. Rose and Mr. Windsor have been received.

ERRATA.

Page 134, col. 2, line 23, for "summary," read *harmony*. Page 135, col. 1, line 48, for "set," read *pet;* line 60, for "aimed," read *arrived*. Page 136, col. 2, line 9, for "Erzcugung," read *Erzeugung;* for "gelung," read *gleang;* line 10, for "Deutschen," read *Deutschem*.

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ON THE

EVOLUTION OF LIGHT

FROM

THE LIVING HUMAN SUBJECT.*

By Sir Henry Marsh, Bart., M.D.

Having obtained from an unquestionable and authentic source an account of a phenomenon of a very curious and interesting nature, not hitherto recorded or brought into public notice, I am induced to bring forward some facts I have been able to collect, illustrative of the spontaneous evolution of light from the living human subject. But as the evolution of light, or phosphorescence, as it is commonly called, has been observed throughout the various kingdoms of nature, to render the subject more intelligible, and to obtain some clue to its interpretation, I shall, antecedently to the statement of these facts, take a bird's-eye view of luminous appearances as they are exhibited in bodies inorganised, and in those that are organised. I shall use the term "phosphorescence" as synonymous with the property of emitting light or being luminous, without at all implying that the presence of phosphorus is necessary to the production of the effect.

The only bodies in nature we know of, which permanently and uniformly emit light, are the sun and the fixed stars—we may regard them as perfect specimens of luminous bodies. From what source this never-failing property arises we can scarcely even conjecture—all we know is, that, during the lapse of countless ages, the property of irradiation has remained in them unaltered, undiminished. Not so with bodies placed under our immediate cognizance; in them a peculiar combination of conditions and circumstances is necessary to give them this property—a property of which, under other and different conditions, they are capable of being wholly deprived. Some substances, in which heat is accumulated to an intense degree, become luminous; for instance, if heat be gradually communicated to a piece of iron, the first effects will be merely an enlargement of dimensions, and an elevation of temperature. If the room be darkened, and the process be continued, the metal, previously invisible, will become visible, and will not only be seen itself, but will also enable surrounding objects to be seen; in fact, it will emit light—it is, in common language, red-hot.

Under a great variety of circumstances, inorganic bodies are rendered luminous and emit light. Bodies transparent, or opaque — colourless, or variously tinted — the diamond, arragonite, strontia, marble, calcareous spar, lime, and various stones, possess this property.

A species of fluor spar, found in the granite rocks of Siberia, shines in the dark with a very remarkable phosphoric light, which increases when the temperature is raised; its light augments when it is plunged into water; in boiling water it is so luminous, that the letters of a printed book can be seen near the transparent vase which contains it; in boiling oil the light is still greater, and in boiling mercury it emits such a brilliant light that we may read by it at a distance of five inches. Many bodies which shine by insolation or heating, may be rendered luminous by friction, by percussion, or by concussion. A similar effect results from chemical action and reaction, as is evinced in the ordinary process of combustion; the colour of the light varying according to the nature of the burning body. Luminous appearances have been observed to take place in many salts held in solution, as acetate of potash and sulphate of soda at the time when crystallisation is going forward; this is an interesting and beautiful phenomenon.

By the agency of electricity many bodies can be rendered luminous; if a series of electric discharges be transmitted across fragments of chalk, sulphate of barytes, sugar, quartz, or succinic acid, they shine for some time after with a brilliant light. The Aurora Borealis, or Northern Lights, are clearly ascertained to be electrical phenomena; they are beautiful exhibitions of luminous objects. That they spring from an electrical origin is proved incontestibly by the fact that they disturb the magnetic horizontal needle; this has been established by the observations of Arago and others. Mr. Edward Cooper has lately been employed in making some very interesting investigations into the nature of shooting stars, which lead to the conclusion that they also are exclusively of electric origin.

A very singular phenomenon has been occasionally observed at sea, the origin of which is also undoubtedly electric. In particular conditions of the atmosphere, a lambent flame, of phosphoric hue, has been seen flickering about the mast-heads or extremities of some of the spars of a ship, to the great terror and astonishment of the crew. It has thus been described by an accurate observer: "I looked forth and saw a pale, greenish, glow-worm coloured flame, of the shape and size of the frosted glass shade over the swinging-lamp in the gun-room. It drew out and flattened as the vessel pitched and rose again; and as she sheered about, it wavered round the point that seemed to attract it, like a soap-sud bubble blown from a tobacco pipe before it is shaken into the air; at the core it was comparatively bright, but gradually faded into a halo."

Major Bonnycastle, in his Canadian Tour, gives an account of a very singular electrical phenomenon observed by him upon the ocean: he says, "About two in the morning the mate suddenly roused all the sleepers in their hammocks, by calling loudly for the master to come on deck, as he observed a most unusual appearance on the lee-bow. The weather had been cold, but there was a clear starry firmament, when in a moment the heavens became overcast to the southward, and an instantaneous and intensely brilliant light, resembling a fiery Aurora, shot out of the sea, and rendered everything minutely discernible, even to the mast-head. The mate and his watch immediately put the helm down, calling up the whole

* This paper, on the Evolution of Light from the Living Human Subject, was read by Sir Henry Marsh before the King's and Queen's College of Physicians, in November, 1838. On the 10th of June, in the following year, he brought the subject before the Royal Irish Academy, and an abstract of his paper was published in the proceedings of that body for the year 1839.

In the present essay he has appended to the original communication additional information, which he has subsequently derived from undoubted authorities, and has availed himself of more recent researches on the subject of animal luminousness.

crew, and awakened the captain; but before this was accomplished, the light had spread more vividly than ever over the whole sea, and the waves, hitherto tranquil, became much agitated, while thick dark clouds from the land seemed to threaten dreadful weather. The spectacle continued to increase in beauty. The whole sea, as far as could be seen, was at length one entire sheet of an awfully brilliant flame, above which shone, along the base of the high, frowning, and dark land abreast of them, a long and magnificent line of fire. The fish, plentiful in these latitudes, and of a large size, seemed alarmed; long, tortuous, darting lines of light, in a contrary direction to the sea, showed immense numbers of large fish flying about as if they were lost. The wind, which had increased a little, had a peculiar hollow sound; and after a length of time passed in contemplating this splendid and extraordinary scene, day broke slowly, the sun rising very fiery and gloomily." "To sail on a sea of fire," the writer observes, "is the only similitude I can fancy to this really awful scene. I have frequently seen the waters of the ocean on fire, as it is vulgarly termed; but then only in small masses, and no more to be compared to what we there witnessed than a November day, when the sun passes murkily through the fog of England, is to the bright and glorious appearance of that luminary on a fine day in the tropics. The oldest sailor in our vessel had never witnessed anything bearing even a distant resemblance to it, except the master, who asserted that he had once seen something very like it somewhere in the Trades. The brilliancy of the light may be conceived, when I say that the sprit-sail yard and mizen-boom were lit by the reflection, as if they had had gas-lights suspended to them; and before the day broke, at four o'clock, I could see the most minute objects on the face of my watch. This appearance came first from the north-west, and there had been a slight Aurora about eleven o'clock."

In all the instances of natural or artificial phosphorescence which come under observation, that electricity plays an important part cannot be doubted.

The recomposition of the electricities resulting from mechanical separation, or from chemical decomposition, is the immediate source of the evolution of light. It must not, however, be concluded that in all instances in which chemical action occurs, a phosphorescence shall be exhibited. In all such cases the opposite electricities are developed, but light is only produced when the substance of the chemical change is an imperfect conductor of electricity. Electrical *decomposition* then results from mechanical disintegration or chemical change, and it is to the *recomposition* of the elementary electric fluids that we are to look for the resulting heat and light.

I have lately been informed of an experiment made on the Continent, with reference to phosphorescent electricity, which I may mention, though in our hands it has been unsuccessful.

It consisted in putting muriate of barytes upon a plate, in a dark cellar, and placing the hand beneath it, when, as soon as the warmth of the hand had penetrated the plate, the hand was exactly delineated in phosphoric blazes on the upper surface of the plate.

If, from inorganised bodies, we direct our views onwards, and consider those which are organised or endued with vitality, some phenomena of a very curious and interesting nature demand our consideration—phenomena which present themselves in organic bodies just at the time when the vital actions are yielding up their authority, and the laws of chemical action, hitherto controlled by the vital, have begun to triumph. At this time, and under the influence of peculiar conditions of humidity and temperature, the laws of chemical action are called into operation, and the bodies, vegetable or animal, thus circumstanced, exhibit sometimes in a very remarkable manner the phosphorescence of which we treat; they are rendered either faintly or brilliantly luminous.

This is expressed in the following words by Becquerel. "In fishes, the phosphorescence manifests itself when they are found in that peculiar state of decomposition which precedes putrefaction. It appears that it displays itself during the struggle which takes place between the forces of organic and inorganic nature, inasmuch as it ceases altogether when the latter is triumphant."

Wood, particularly the root, becomes luminous and evolves light under these circumstances. A gentleman told me he was much surprised not long since, on returning home late at night, and passing the entrance-gate leading to his house, to observe a luminous appearance which shone clearly in the dark. On noting the spot and visiting it next day, he found the decaying stump of a sycamore tree; he found, on further investigation, that it shone most brightly in the middle where was the softest part of the wood.

The pith of many plants shines; soft spongy woods, as the willow and poplar, are particularly luminous; but the more solid woods, as the elm, beech, and oak, do likewise evince this phenomenon. The necessary conditions are a medium temperature and humidity; extremes of temperature and desiccation destroy this property. Wood which shines in atmospheric air, or oxygen gas, consumes oxygen and produces carbonic acid gas, thus identifying it with a very slow process of combustion; the presence of phosphorus—for phosphate of lime has been ascertained to exist in the ashes of many woods—may have some share in conducing to this effect—an effect of which the farmer is well aware, when his valuable mass of vegetable matter is subjected to this slow process of what we may term spontaneous combustion. Thus it is that accumulated masses of vegetable matter, as hay and corn, not sufficiently dried, undergo fermentation, and if the process be not interrupted, evolve light and caloric, and are destroyed by combustion. The degrees of heat and moisture, which, in the living grain conduce to vegetation, and in the process of malting convert starch into sugar, are those which in the decaying vegetable produce slow combustion. The far-famed ignis fatuus is a phenomenon which, like those already alluded to, is produced by electricity, the result of chemical action in vegetable matter in a state of decay, when the temperature is in neither extreme, and humidity sufficient to lend its aid in producing the effect; accordingly it is in damp and moist situations that it is most frequently seen. The Draco volans, in meteorology, is a fiery exhalation frequent in marshy and cold countries, and dependant on the same causes as the ignis fatuus; it is most common in summer, and though principally seen playing near the banks of rivers, or in boggy places, yet sometimes mounts up to a considerable height in the air, to the no small terror of the amazed beholders. Its appearance is that of an oblong, sometimes roundish, fiery body, with a long tail.

Dr. Martin H. Lynch has lately favoured me with the following account of a remarkable phenomenon, observed by him on a bog in the county of Galway, about the latter part of January, 1836. He says, "I left Clifden, County Galway, about half-past six in the evening, to visit a kinsman at Lavally, in the same county, and distant sixty-three English miles. Being the only medical man resident in a very extensive district, and physician to a public institution, it was essential that my absence should be as short as possible; therefore, having transacted professional business during the day, I started in the evening to travel all night, and proceeded on horseback—the most rapid mode in a mountainous country. It was my intention to stay for two or three hours at the small thatched inn, so well known to tourists, which is distant twenty-one miles from Clifden, on the road to Galway town. The night was rather dark but very calm; during the

day I had ridden several miles in the neighbourhood of Clifden, but had not noticed the slightest crust of ice, the absence of which I fancied was owing to the insular and well-sheltered situation of Clifden; for, about half way between Clifden and the inn before alluded to, I began to hear the sharp sounds produced, as I then supposed, by the cracking of the ice in the drains on either side of the road. To those who have never seen a moss or bog, it may be well to mention that the cantering, or even trotting of a horse, is sufficient to agitate a bog-road so as to crack the ice in the drains on either side.

I now observed that it became much darker, and, I thought, foggy; the darkness was so impenetrable, that for safety I was compelled to refrain from guiding in the slightest degree the sagacious and enduring Achill pony that I rode, being convinced, that under such circumstances, his judgment was more to be depended on than my own. Had I acted otherwise, it is not improbable man and horse would have perished in a bog-hole, or have been drowned in some of the numerous lakes, along which the unfenced road ran like a pier or quay.

A few minutes after I had noticed the increase of darkness and the cracking sound, I was suddenly dazzled by immense cones of fire rising on all sides around me; these cones varied in magnitude, few had less than five or six feet diameter at the base, and many appeared to measure twenty or thirty feet at the same part. The number visible at any particular moment varied, but, as well as I can remember, rarely exceeded thirty. They sprung up at irregular distances from each other and from me, and soon disappeared to be succeeded by others. Some seemed nearly a mile distant, others a few yards only. The form of each might be compared to that of the flame proceeding from a plate containing burning alcohol. The shade of colour accompanying the flame was not blue; it was a reddish white, but at this distance of time I cannot speak positively on this point. The light proceeding from them was not in proportion to their size and number; even at the moment I was amazed to find that, although they dazzled and occasioned dizziness by their sudden appearance and disappearance, they produced but little effect on the profound darkness. These appearances continued for several miles; the cones of flame rose from the ground apparently to a height varying from six to thirty feet, and did not, like "Will o' the wisp," move to and fro. A little after midnight it began to blow freshly from the north-east, with heavy rain; but during the remainder of my ride I did not see any trace of even the slightest flickering or flame."

The destructive fire, which, a few years since, reduced to ashes the stores of the Dublin Custom-house, was supposed to have originated in the spontaneous combustion of cotton and other vegetable matters, and, more recently, the mysterious fires at the royal dockyards probably owed their origin to the spontaneous ignition of oily substances mixed with tow and carbonaceous matter.

In a late number of a scientific journal, attention is directed to the circumstances in which combustion takes place from the decomposition of such materials. The writer observes, "It is a fact, better ascertained than accounted for, that fixed oils, when mixed with any light kind of charcoal, or substance containing carbon, such as cotton, flax, or even wool, which is not of itself inflammable, heat by the process of decomposition, and, after remaining in contact some time, at length burst into flame. This spontaneous combustion takes place in waste cotton which has been employed to wipe machines, and then thrown away, and allowed to accumulate in a heap. We have known an instance of the kind in a manufactory for spinning worsteds, where the waste wool or 'slubbings,' as it is termed in Yorkshire, was thrown into a corner and neglected. It then heated, and was on the point of bursting into flame, when the attention of the workmen was directed to the heap by the smoke and smell. In cotton-mills the danger exists to a still greater degree, and it is believed that the destruction of many cotton factories has been occasioned by this means. The cause of this peculiar property of fixed oils deserves more attention than has hitherto been paid to it."

Ships also, laden with cotton, have been destroyed at sea, by fire originating in the spontaneous ignition of the cargo. It is, however, in recently dead *animal* matter, during the incipient stage of decomposition, that the phenomenon of phosphoresence or luminousness is most strikingly exhibited; this is observable in the perishing materials of the mammalia, birds, amphibia, and, most remarkably in marine and even fresh water animals. Soon after death fishes become exceedingly luminous; the mackarel (scomber scombrus), for instance, dies as soon as it is taken out of the water, and very shortly afterwards emits a phosphoric light. Dr. Jacob has informed me that in a dark cellar, where are deposited his marine specimens, he has been able to read lines in a book placed near a decaying and luminous fish; this he has observed to appear before the least putrefactive odour was perceptible, and on passing his hand over the fish his hand became luminous, as if it had been smeared with phosphorated oil.

I remember, in the days of my boyhood, a painful occurrence, which had nearly led to a fatal issue; it was a dangerous trick practised on a timid youth a fish, brightly luminous, was waved backward and forward in a dark room through which he was passing. The terror excited by this unexpected luminous apparition threw him into convulsions. The fish employed on this occasion was a mackarel.

In burial grounds, luminous appearances have often been seen, and fearful and awful are they to the eye of superstition. These appearances are clearly traceable to the same source, and take place during the earlier stages of disintegration. From this phenomenon, Moore, in one of his exquisite lyric gems, has derived a beautiful and highly poetical simile:—

> "Thy midnight cup is pledged to slaves,
> No genial ties unwreath it;
> The smiling there, like light on graves,
> Has rank, cold hearts beneath it."

In "Earl Richard," an ancient ballad published in Sir Walter Scott's "Minstrelsy of the Scottish Border," these lines occur:—

> "And where that sackless knight lies slain,
> The candles will burn bright."

Sir Walter Scott adds in a note, "These are corpse-lights, called in Wales canhwyllan cyrph, which are seen to illuminate the spot where a dead body is concealed. Some years ago, the corpse of a man, drowned in the Ettrick, was discovered by means of these candles. Rustic superstition derives them from supernatural agency, and supposes that as soon as life has departed, a pale flame appears at the window of the house in which the person has died, and glides towards the churchyard, tracing through every winding the route of the future funeral, and pausing where the bier is to rest. This and other opinions, relating to 'the tomb-fires' livid gleam,' seem to be of Runic extraction, having, like many fabulous tales, some foundation in fact."

A very curious, though not a very pleasing phenomenon of the same kind, and arising from the same causes, has been observed by many in dissecting-rooms. It has been described by my friend Dr. Hart, who favoured me with the following statement:—"Having had occasion to enter the dissecting-room of the Park-street School of Medicine on a dark, damp night in 1827, my attention was attracted by a remarkably luminous appearance of the subjects on the tables, similar to that which fishes and other

marine animals exhibit in the dark. The degree of illumination was sufficient to render the forms of the bodies, as well as those of muscles and other dissected parts, almost as distinct as in the daylight. This luminosity was communicated to my fingers from contact with the dead bodies, from any part of which it could be removed by scraping it, or wiping it with a towel. I observed that the surfaces of the dissected muscles were brighter than any other parts. Although I have repeatedly visited the dissecting-room since, at all hours of the night, and at all seasons of the year, I have never since been able to discover a similar luminous appearance.

This phenomenon has been observed by Drs. Harrison, Jacob, and Houston.

In the 34th vol. of the "Cabinet Cyclopædia," Mr. Donovan, under the head of putrefactive fermentation, mentions a singular case which occurred at the Richmond Hospital School of Medicine, in the year 1828. "The body of a girl, about 13 years of age, was laid on the dissecting table; there was nothing remarkable in its condition: it was summer. In some days a white smoke began to exhale, which increased for two days, and then became very dense. There was no more fœtor at first than in ordinary cases, but at length a smell so intolerable arose, that it was necessary to remove the body to the vault. I occasionally watched it, but nothing further occurred; the smoke in a few days more ceased. There was no heat developed that I could perceive."

It is not improbable that the dense white vapour, seen in this case during the day, would have proved luminous in the dark; no remark, however, was made of its appearance by night.

The prosecution of our subject leads us forward to a brief consideration of the evolution of light, as a function in living vegetables and living animals. From observations which have been made, we are led to believe that the flowers of several plants, in serene and warm summer evenings, disengage light and emit sparks. It is said to have been observed in the nasturtium, the marigold, the Indian pink, and other flowers; also in some chryptogamic plants adhering to old wood, and growing in mines. The more warm and moist the locality, the clearer, it is said, is the light emitted.

Several species of lichens, especially subcorticalis, subterranea, and phosphorea, are occasionally phosphorescent, and more or less luminous in the dark; and hence they often give to the cellars and mines, in which they grow, an extraordinary and brilliant appearance. In the coal-mines in the vicinity of Dresden they are said to be so abundant and so luminous, as even to dazzle the eye by the brilliant light that they afford. This light is increased by the warmth of the mines, so that, hanging in festoons and pendents from the roof of the various excavations, twisting round the pillars, and covering the walls, they are said, by their brightness, to give to the Dresden coal-mines, in which they abound, the semblance of an enchanted palace. Mr. Erdman, the commissioner of mines, thus describes the appearance of the rhizomorphæ in one he visited: "I saw the luminous plants here in wonderful beauty; the impression produced by the spectacle I shall never forget. It appeared, on descending into the mine, as if we were entering an enchanted castle. The abundance of these plants was so great, that the roof, and the walls, and the pillars, were entirely covered with them, and the beautiful light they cast around almost dazzled the eye. The light they give out is like faint moonshine, so that two persons near each other can readily distinguish their bodies. The lights appear to be most considerable when the temperature of the mines is comparatively high.* It is asserted that the dictamnus albus, in peculiar states of the weather, diffuses around itself an atmosphere, which, by contact with the flame of a candle, ignites and emits a brilliant blue flame. On this part of our subject, however, observations have been so few that we dare not speculate upon them, or make them the groundwork of any attempt at explanation; and yet it is a subject of considerable interest—one which merits a more minute and extended investigation, and which is immediately connected with the general subject of phosphorescence in animated nature.

This property of becoming luminous during life, independently of reflected light, is possessed by certain genera of several classes of the animal kingdom; but it is amongst the almost infinitely varying and often shapeless forms which inhabit the ocean that we shall find the most beautiful and wonderful exhibitions of phosphorescent lights and illuminations.

The animals which most distinctly and constantly manifest this curious function are some infusoria, zoophyta, acalephæ, echinodermata, annelida, myriapoda, insecta, crustacea, and mollusca.* To give a detailed description of each species is neither my object nor intention; I shall merely select a few of such instances as display most remarkably the characters and properties of animal light.

Several species of infusoria belonging to the genera cercaria, volvox, vibrio, trichoda, and lincophœa, are said to be luminous; in this country I believe it has not been generally observed that fresh water infusoria possess this property. To Sir Philip Crampton I am indebted for the following corroboration of this fact. He observed a luminous appearance, similar to that exhibited in the ocean, in the waters of a mountain lake, which has given name to his residence, Lough Bray; the surface of a piece of muslin, through which some of the water had been strained, presented a luminous appearance; thus proving that in fresh water, as well as in the sea, luminous animalculæ exist.

Among the floating polypi (the polypi natantes of Lamarck), the pennatula or sea-pen is most remarkable; it derives its name from its singular resemblance to a quill with its plumes. It is a phosphoric animal, and emits a light so brilliant, that by it the fishermen are reported to see fishes swimming near it. Several species of the pennatula are phosphorescent.

The acalephæ furnish us with a numerous catalogue of luminous animals; almost every species of medusa, beroe, physalia, rhizophora, stephanomia, and physophora enjoy this function. Of these, Dr. Macartney, in his interesting memoir read at the Royal Society, has described and given drawings of three species discovered by him on our own shores—beroe, medusa hemispherica, and m. scintillans; it is to this last almost microscopic animal that he chiefly attributes the diffused phosphorescence of the ocean. One of the largest and most splendid of the luminous creatures of the deep is the medusa pellucens, discovered and described by Sir Joseph Banks; it measures six inches across the crown or umbella, the central parts are opaque, and it emits vivid flashes of light during its contractions.

Few instances of animal luminousness are met with among the echinodermata; a species of asterias, ophiura telactes, and phosphorea, are, however, described as possessing this property.† Several species of nereis, as n. phosphorans, noctiluca, cirrigera, mucronata, and planaria retusa, with other annelidans, evolve light.

Among the crustacea we find cyclops brevicornis, gammarus pulex, scyllarus (?), and cancer fulgens, &c. In a species of cancer seen by Smith in the Gulf of Guinea, the light (which seemed to him to be emitted by the brain) was of a deep blue colour when the animal was at rest; but when it moved, bright corruscations of silvery light were darted from it in all directions.

Various observers have included the salpæ among

* Burnett's Outlines of Botany.

* Cyclop. Anat., Art. Animal Luminousness.
† Ibid.

phosphoric animals; of these salpa confederata (one of the tunicaries of Lamarck) dwells in the ocean at a great distance from land. Several individuals are attached by their sides to each other in rows; during the day they appear like white ribands, and during the night like ribands of fire, which alternately roll up and unfold themselves, either from the motion of the water or from the will of the animals that compose them.

The pyrosoma atlanticum, mediterraneum, and giganteum are brilliantly luminous; their dimensions vary from five to fourteen inches in length. The external surface of the p. atlanticum is studded with thick elongated tubercles, which shine like polished diamonds; as it descends below the surface it is described as presenting the appearance of a moving ball of fire. Its hues are ever varying, and when in motion it shines most brilliantly.

The pholas, or stone-borer, is remarkable for its luminous property, which was noticed by Pliny, who observes, "that it shines in the mouth of the person who eats it; if it touch his hands or his clothes, it makes them luminous, and that its light depends upon its moisture."

M. Reaumur states that it is more luminous in proportion to its being fresh; and that when dried its light will revive if it be moistened either with fresh or salt water, but that brandy immediately extinguishes it. He endeavoured to make this light permanent, but none of his schemes succeeded. Beccarius, who tried numerous experiments on the pholas, found that of all the liquors into which he put the pholades, milk was rendered the most luminous. A single pholas made seven ounces of milk so luminous, that the faces of persons might be distinguished by it. He also states that when the animal is preserved in honey, the property of becoming luminous would continue longer than a year, and then it would, when plunged in warm water, give as much light as ever.

Several naturalists have given accounts of certain fishes having been seen to give out light, while alive, in their native element; among others, Mr. Bennett, in a paper read at the Zoological Society, has described some fishes recently discovered to be luminous.

Herrings, it is stated, as they move in shoals of myriads through the waters, throw off a kind of slimy secretion, which extends over their columns, and is easily seen in calm weather; this substance, in gloomy still nights, exhibits a phosphoric light, as if a cloth faintly luminous was spread over the sea. We may here just advert to the fact, that Fourcroy and Vanquelin, in analysing the milt of the carp, found phosphorus in such quantity as to give a bright light in the dark. Sharks have been reported as luminous, and Dr. M'Culloch enumerates also the pollock, the pilchard, the sardine, the whiting, the mackarel, and the gar, as being sometimes accompanied by phosphoric lights.

This property of evolving light seems to reside either in a fluid secreted by a vital process, and generally diffused over the surface of the animal; or it is confined to a particular and especial organ destined to perform this function. In the acalephæ it is asserted that the exudation, which is luminous, is that which possesses the stinging property from which these animals derive their name. In some animals the light appears to be increased or diminished by muscular motion, and is probably not wholly independent of the will of the animal.

MM. Quoy and Gaimard state that, in handling luminous marine animals while alive, they have been sensible of an odour proceeding from them similar to that which is perceived around a highly charged electrical apparatus.* The various marine animals above alluded to, as evolving light from their living bodies, together with perhaps many yet undiscovered species possessing the same property, are now believed to be the *chief* source of that beautiful and remarkable phenomenon, the luminousness of the sea. Of these creatures, some, as certain medusæ, are so extremely minute as to require the aid of a powerful lens to prove that, minute as they are, they still possess the characters of organised beings, and are capable of active voluntary motion. The water of the sea is sometimes so densely crowded with these small animals that, when passed from one vessel to another, a stream of flowing light is seen; by adhering to the fishermen's nets, they occasionally give them a very curious and beautiful appearance; when slowly raised from the sea, in the dimness of twilight, the nets present a luminous outline; each of the meshes is bounded with a line of light, and the whole looks like a fairy scene.

For miles around, these little animals sometimes give to the sea the aspect of a vast surface of snow, and produce on the ocean's face a new milky-way. This appearance of the sea, produced when luminous animals are crowded on the surface, has more than once terrified the inexperienced navigator of intertropical seas. The oceanic illumination is exhibited in two distinct forms, either that of a diffused sheet of light expanded on the surface of the ocean, or the waves appear to sparkle with intermitting and often vivid scintillations. The scintillations are observed most distinctly when the crests of the waves are broken by the wind, or by the transit of a ship, and are much more brilliant on some nights than on others. Lord Byron gives a beautiful description of this phenomenon in the "Corsair," a description evidently derived from personal observation.

> "Flashed the dipt oar, and sparkling with the stroke,
> Around the waves phosphoric brightness broke."

In a note it is observed, "By night every stroke of the oar, every motion of the ship or boat, is followed by a slight flash, like sheet-lightning, from the water." This phosphorescence has likewise been observed to follow the course of sea currents, and it has been noticed that when the sea is most brilliantly illuminated, small fish abound, and are taken in great numbers."

Sometimes, when heavy tropical showers of rain descend at night, the sea is suddenly kindled up, and as suddenly the light is extinguished. These sudden alternations of light and darkness are described as being remarkably beautiful.

Many years since I had one, and but one, opportunity of witnessing, on the bold and romantic western shores of Ireland, the oceanic phosphorescence displayed with peculiar splendour and effect. The huge waves of the Atlantic were rolling magnificently, and in slow succession, on the pebbled beach of a deeply indented bay, involved in lofty cliffs and sea-worn caverns; it was on a still night, preceded by a day of storms. The boundary of the waves, as they advanced and retreated on the shore, was marked by a broad and brilliant fringe of silvery light, the waves themselves tipped at intervals with a restless, and ever-flitting, and beautiful phosphorescence. There was just sufficient starlight to give a dim view of the lofty cliffs on either side of the bay, against which the waves were beating with incessant roll. The effect of the whole was inexpressibly grand. Next morning the sea was found so densely crowded with what the fishermen called jelly-fish, that it was difficult to propel a boat through the water, and swimming, which I vainly attempted, was rendered impracticable.

Dr. Macartney, in his "Observations on Luminous Animals," gives the following interesting account of the illumination of the sea:—"I have had two opportunities of seeing an extended illumination of the sea. The first night I saw this singular phenomenon was extremely dark; many of the medusa scintillans and medusa hemispherica had been observed at low water, but on the return of the tide they had suddenly dis-

* Cyclop. Anat. and Phys., Art. Animal Luminousness.

appeared. On looking towards the sea I was astonished to see a flash of light, of about six yards broad, extend from the shore for apparently the distance of a mile and a half along the surface of the water. The second time that I saw this sort of light proceed from the sea, it did not take the same form, but was diffused over the surface of the waves next the shore, and it was so strong that I could for the moment distinctly see my servant who stood at a little distance from me; he also perceived it, and called out to me at the same instant. On both these occasions the flash was visible for about four or five seconds."

An extraordinary series of phenomena, connected with a particular display of the luminousness of the sea, is reported by Mr. Henderson* as having occurred in the Atlantic on the 5th of March, 1824. About nine, p.m., the sea appeared unusually luminous. Every person who kept his eye fixed upon it for but a short time was immediately affected with giddiness, headach, pain in the eyeballs, and slight sickness. Although these symptoms varied in intensity amongst the spectators, yet there was not one on board who did not feel some degree of them, and all imputed them to the effect of the light proceeding from the surface of the ocean. Mr. Henderson remarks, "For my own part, the headach, &c., which followed immediately my looking at the water, was particularly severe, nor did it go off until morning. The effects I experienced were like those produced by smoking too much tobacco.†

We have seen that the property of emitting light is enjoyed in a very exalted degree by some aquatic animals; it is not, however, confined to them, many terrestrial beings, some of which crawl on the ground, while others rise on wings in the air, are furnished with organs capable of eliminating light.

The first we shall notice is a small annelidan discovered by George J. Allman, Esq., of this city. We shall copy his own description, from the report of one of the meetings of the Dublin Natural History Society. He says, "I observed, in the month of September, that some of the turf bogs in the western parts of the county of Cork exhibited by night, on the recent removal of their surface, a great many minute luminous points, presenting almost the appearance of the sea when its waters are agitated during the night. This appearance was very transitory, lasting but for a few seconds after the exposure of the subjacent peat, and requiring for its subsequent manifestation a second removal of the surface. On bringing home some of the luminous peat, and making a careful examination, I found that this interesting phenomenon was caused by a small white worm belonging to the class annelides. The power of emitting the light appeared voluntary, and to require for its manifestation that the little animal should in some way be irritated. On holding one of them over alcohol, an exceedingly brilliant phosphorescence would take place, and last for a few seconds, excited, doubtless, by the irritation of the alcoholic vapour. This phosphorescence consisted in a very beautiful clear green light, and did not appear to be confined to any particular spot, the entire animal appearing equally luminous. I find upon inquiry that the phosphorescence of the bogs is well known to the country people of the western parts of the county of Cork, though, as may be expected, not referred by them to its cause.

The little animal which is the cause of this beautiful phenomenon is a small white annelidan, about half an inch in length, and composed of a number of setigerous rings, very distinct after the animal has become contracted from immersion in spirits. Each ring bears a fasciculus of very minute setæ on either side, requiring, in order to render them visible, a very high magnifying power.

* Cyclop. Anat., Art. Animal Luminousness.

† Trans. Med. and Phys. Soc. of Calcutta, I., 107.

Duges, in a paper published in the eighth volume of the 'Ann. des Sciences Nat.,' second series, describes a luminous annelidan belonging to the same division of the class as that of mine, which he calls lumbricus phosphoreus, and states that he found it in the tan of the hot-houses in the Botanic Garden of Montpellier. The lumbricus phosphoreus of Duges, however, differs in several important points from mine, which I have not as yet been able to identify with any described species. The discovery of this little creature, then, I look upon as not altogether destitute of interest, both because it is the only Irish land animal, with the exception of geophilus electricus, hitherto described as phosphorescent, and because it is the cause of a singularly striking and beautiful phenomenon."

The light of some centipedes inhabiting the islands of the Pacific is described as being of a beautiful emerald green colour; it appears to depend upon a mucous matter covering the animal, which, when rubbed off by the fingers, communicates to them, it is said, a smell resembling that of muriatic acid. Scolopendia electrica is a native of some parts of Britain; but its light is seldom seen, in consequence of the animal inhabiting holes, from which it is not often disturbed during the night. It is very luminous, and when crawling along a pathway, sometimes leaves a track of phosphoric matter that may be lifted. Nine species of lampyris are described as being luminous; of these lampyris noctiluca, the common glow-worm of these countries, exhibits this phenomenon in a very striking manner. The female of this species is remarkable for the beauty and brilliancy of its light; it is of a blueish or greenish white colour, and seems to envelop the whole insect; the hour on a watch may be ascertained by it. The luminosity of the male is of a delicate blueish tint, but much more feeble than that of the female. The period of emitting light is confined to one season of the year, and is generally supposed to be connected with the function of propagation.

Another beautiful example of a luminous insect is seen in elater noctilucus, or fire-fly; it is more than an inch in length; under its body is a circular patch, which in the dark shines like a candle; on each side of the pro-thorax, on the dorsal surface, is a prominent globular body, in size larger than a grain of mustard-seed; each of these bodies (thoracic tubercles) is luminous, and emits light like a rising star. The light given out by these insects is so brilliant that, with eight or ten of them, a book may be perused as with a candle. The negroes in the West Indies frequently collect a number of them together in small thin muslin bags, and the light, as from a lantern, is supplied by the hand of Nature.

In Siam, the trees on the banks of the rivers, in the twilight of summer, are splendidly illuminated by swarms of fire-flies, which emit and conceal their light as uniformly as if it resulted from machinery of the most exact and perfect contrivance. Mouffet relates that when Sir Thomas Cavendish and Sir Robert Dudley landed in the West Indies, they saw in the evening an infinite number of moving lights in the woods, which, though nothing more than fire-flies, were mistaken by them for Spaniards advancing to attack them by torch-light, upon which they immediately retired with precipitation to their ships, not daring to risk an engagement at such an hour, and against such unequal numbers. Naturalists enumerates fifteen species of elater, all of which are luminous.*

The lantern-fly, or fulgora laternaria, is a brilliant and beautiful insect; when of full size it is nearly three inches and a half in length, and five and a half from tip to tip of the expanded wings. The body is of a lengthened oval shape, and divided into several

* Cyclop. Anat., Art. Animal Luminousness.

rings or segments. The head is nearly equal in length to the rest of the animal. Its general colour is a beautiful yellow, here and there strongly tinged with green, and variegated with many bright reddish brown stripes and spots. Its large and yellow wings exhibit all the beauty and variety of colour with which nature is so lavish in adorning the birds and insects of warm and tropical climates. It is a native of Surinam, and other parts of South America, and during the night diffuses a light so strong—a phosphoric splendour so luminous—that it can supply the place of torch-light; and a few, it is said, being fastened together, are employed to enlighten the path of the traveller, and guide his footsteps during the darkness of night. Madame Mereau, in her work on the Insects of Surinam, gives a lively picture of the surprise excited in her mind, when first these light-emitting flies burst upon her view. "The Indians once brought me," she says, "before I knew they shone at night, a number of these lantern-flies, which I shut up in a wooden box. In the night they made such a noise that I awoke in a fright, and ordered a light to be brought, not knowing whence the noise proceeded. As we found it came from the box we opened it, but were still much more alarmed, and let it fall to the ground in a fright, at seeing a flame of fire come out of it; and as many animals as came out, so many flames of fire appeared. When we found this to be the case we recovered from our fright, and again collected the insects, highly admiring their beautiful appearance." Dr. Macartney says, "The light in this genus (fulgora) has been observed to issue from the remarkable proboscis on the fore part of the head. This part has always been described by authors to be hollow, or empty, which I have found to be perfectly correct; and, what is still more extraordinary, that the cavity communicates freely with the external air, by means of a chink or narrow aperture placed at each side of the root of the proboscis. Fulgora candelaria, pyrrhorhyncus, and serrata likewise possess the property of emitting light; it has also been observed in other genera of the same class, as bupestris ocellata, chiroscelis bifenestrata, scarabæus phosphoricus and pausus sphœrocerus.*

Limox noctilucus, one of the gasteropodous mollusca, described by M. Orbigny, produces a phosphorescent secretion capable of emitting a light of considerable brilliancy. "The luminous organ is a small disc of greenish colour by daylight, soft in texture and slightly contractile. The light is only visible when the creature is expanded and in motion. The disc is always covered with a greenish mucus, which, if wiped off, is speedily renewed. It is found to be connected with the generative organs, and appears to be principally useful during the season of love."

Numerous have been the theories advanced by philosophers to explain the nature of the luminous matter which gives rise to the phenomena detailed above, as manifested by living animals; many of them, however, have fallen to the ground under the accumulation of facts and the advancement of science. Beccaria, Mayer, &c., supposed that light is imbibed from the sun's rays by luminous animals, during the day, and given out in the dark; while Brugnatelle thought that light is swallowed with the food and disengaged by peculiar organs. From experiments made with a voltaic current on the luminous organ of the lampyris, Becquerel draws the following inference:—"That phosphorescence in animals, particularly in the lampyris, in whom it manifests itself with brilliancy, is the result of a chemical action, which the will of the animal controls and guides, inasmuch as it possesses the faculty of diminishing it insensibly, even to the point of causing it to disappear altogether." The opinion of Darwin, in which he was supported by H. Davy, Treviranus, and others, was, that a fluid containing phosphorus is secreted by the luminous organs, and shines on its being exposed to the oxygen of the air introduced by respiration.

Macartney and Todd believe that the luminous organs concentrate and modify the nervous influence so as to form it into light, so that, according to their theory, animal luminousness is an effect *solely* of *vital* power.

Tiedemann, in his "Comparative Physiology," thus expresses his opinion: "Animal luminousness would seem to depend on a matter, the product of the changes of composition accompanying life, and, to all appearance, secreted from the mass of humours by particular organs. This liquid probably contains phosphorus or an analogous combustible substance, which combines with the oxygen of the air or of aërated water at a medium temperature, and thus produces the disengagement of light. The preparation and secretion of this substance are acts of life, which change, augment, or decrease by the influence of external stimulants, whose action on the animals modifies their manifestations of life. But the phosphorescence itself depends on the composition of the secreted matter, and cannot be regarded as a vital act; because, on certain occasions, it continues for whole days, and even after the death of the animal."

Dr. Coldstream believes (with Macartney and Todd) "that in many, perhaps in all luminous animals, both terrestrial and marine, the light emitted is the consequence of an evolution of an imponderable agent by the nervous systems of the animals, just as the electrical fishes give their shock without the interposition of any visible or ponderable secretion. In this view we may regard the luminous organs as playing the same part in relation to the evolution of light as the electrical organs of the torpedo do to the production of the shock. The single fact of luminousness continuing in the organs or in their effused fluids, after they have been removed from the body of the animal, seems to point to a great difference existing between the two classes of phenomena which we have just compared, in certain animals—namely, when the phosporescence continues after death, and when, as in some delicate acalephæ, the brightest radiance is emitted in momentary fitful flashes. But it may be that the difference is more apparent than real; for this fact may be explained by supposing that a phosphoric substance really does enter into the composition of the light-giving organs; and yet we may with great probability conjecture that *it* is not the *chief* agent in causing the phenomena of luminousness.*

With respect to the uses of this remarkable property little is known with any degree of certainty. In insects it has been supposed by most observers to be connected with and subservient to the function of reproduction. Others have conjectured that the light may in some instances be a means of defence; and Macculloch has suggested that in marine animals it may be a substitute for the light of the sun in the depths of the ocean.

The prosecution of my subject leads me briefly to allude to a luminous appearance of a wholly different nature and origin, which has been observed in the eyes of some animals, both predacious and herbivorous; in an obscure light they shine brilliantly. The light thus seen is caused by a mirror or reflector placed in the posterior part of the eye; this is called the tapetum lucidum. The inner villous coat of the choroid, which in man is covered with the black pigment, exhibits in several animals a brilliant colour and a metallic lustre; this portion of the choroid is the tapetum. It is a peculiar condition of the surface of the choroid, by means of which rays of light are reflected. It presents the form of a large irregular patch placed at the bottom of the eye, outside the entrance of the optic nerve. It is of a beautiful blue,

* Cyclop. Anat., Art. Animal Luminousness.

* Cyclop. Anat., Art. Animal Luminousness.

green, or yellow colour, with splendid metallic lustre, and sometimes white as silver. It is not obscured by the black pigment which covers the rest of the surface. It acts as a perfect concave reflector, causing the rays of light, previously concentrated on the bottom of the eye, to be reflected, and thus produces the remarkable luminous appearance observed in the eyes of cats and other animals when seen in obscure situations. This provision is absent in man, the quadrumanous animals, bats, the insectivorous order, perhaps all the rodentia, the sloths, and many other of the class mammalia, while it is present in the majority if not all of the ruminants, as well as in the horse, the cetacea, and most of the carnivorous tribe. It does not appear to exist in birds or reptiles, and is absent in the osseous, although present in the cartilaginous fishes.*

The eyes of a concealed tiger, like balls of fire, glaring on the object destined for its prey, unexpectedly encountered in an Indian jungle, in the obscurity of approaching night, have caused, and are sufficient to cause, the stoutest heart to quail. The luminous appearance of the eye in animals provided with the tapetum, is sufficiently accounted for by the reflection of light caused by this natural mirror. But there is a brilliancy of the eyes, caused by vehement mental emotions, which this will not account for. When an animal is furiously impelled by rage, lust, or famine, the eyes appear to glisten. What can be the cause of this? What gives this peculiar expression to the eye? Homer, always true to nature, has not omitted to pourtray this, in describing his hero Achilles rushing to battle.

> "Grief and revenge his furious heart inspire;
> His glowing eyeballs roll with living fire."

Shakspeare, too, one of the most accurate delineators of the passions that ever existed, when drawing a picture of intense hatred, makes one of his characters exclaim,

> "Mine eyes should sparkle like the beaten flint."

In particular states of the atmosphere, the hair of many animals, under the influence of friction, emits abundantly electric sparks with a crepitating sound. This phenomenon may be observed in the domestic cat, and even human hair has been described as emitting electric sparks when briskly rubbed or brushed.

It has also been asserted that electric sparks, accompanied with a crackling noise, have been seen to issue from the skin of some individuals when rubbed lightly and quickly with a linen cloth. An instance is related by an Italian physician of a lady of Verona, from whose limbs "sparks of fire flew out plentifully as often as they were lightly rubbed with linen." He adds, that "oftentimes having rubbed her hands upon her sleeve, she observed a flame running about, as fired exhalations are wont to do."

According to the same writer, similar phenomena were observed on the person of a bookseller at Pisa, when the skin of his arms and back was rubbed with linen.

Having now briefly referred to some of the most striking instances of luminousness throughout the extended range of inorganic and organic matter, it remains for me to state the very remarkable facts which form the chief object of this communication. The luminous appearance I am about to describe was observed only when disease had made deep ravages in the system. It is the following:—

"It was ten days previous to L. A.'s death that I first observed a very extraordinary light, which seemed darting about the face, and illuminating all around her head, flashing very much like an Aurora Borealis. She was in a deep decline, and had that day been seized with suffocation, which teazed her much for an hour, and made her so nervous that she would not suffer me to leave her for a moment, that I might raise her up quickly in case of a return of this painful sensation. After she settled for the night I lay down beside her, and it was then this luminous appearance suddenly commenced. Her maid was sitting up beside the bed, and I whispered to her to shade the light, as it would awaken Louisa. She told me the light was perfectly shaded. I then said, 'What can this light be which is flashing on Miss Louisa's face?' The maid looked very mysterious, and informed me she had seen that light before, and it was from no candle. I then inquired when she had perceived it; she said that morning, and it had dazzled her eyes, but she had said nothing about it, as ladies always considered servants superstitious. However, after watching it myself half an hour, I got up and saw that the candle was in a position from which this peculiar light could not have come, nor, indeed, was it like that sort of light; it was more silvery, like the reflection of moonlight on water. I watched it for more than an hour, when it disappeared. It gave the face the look of being *painted white* and *highly glazed*, but it danced about and had a very extraordinary effect. Three nights after, the maid being ill, I sat up all night, and again I saw this luminous appearance, when there was no candle nor moon, nor, in fact, any visible means of producing it. Her sister came into the room and saw it also. The evening before L. A. died I saw the light again, but it was fainter, and lasted but about twenty minutes. The state of body of the patient was that of extreme exhaustion. For two months she had never even sat up in the bed. Many of her symptoms varied much from those of other sufferers in pulmonary complaints whom I had seen, but the general outline was the same. Her breath had a very peculiar smell, which made me suppose there might be some decomposition going forward."

The fact is certain, the source whence derived authentic, the circumstantial detail clear and conclusive. The person from whom I derived the knowledge of this interesting fact is one of a clear head, superior power of observation, and utterly exempt from the distortions and exaggerations of superstition. The young lady about whose person these luminous appearances were manifested, I had seen several times before her return to the country; her lungs were extensively diseased; she laboured under the most hopeless form of pulmonary consumption.

Extraordinary as the foregoing case may appear, it is not without parallel. A few months since I was in attendance upon a young lady who was in the last stage of pulmonary consumption. She had read in the newspapers a brief notice of a communication which I had, a short time previously, brought before the College of Physicians, upon the evolution of light in the living human subject, and feeling deeply interested in so remarkable a phenomenon, had, more than once during my visits, directed her conversation to that subject. It is no less remarkable that she should, in her own person, have subsequently exhibited similar phenomena. The following statement I received from her sister:—

"About an hour and a half before my dear sister's death, we were struck by a luminous appearance proceeding from her head in a diagonal direction. She was at the time in a half recumbent position, and perfectly tranquil. The light was pale as the moon, but quite evident to mamma, myself, and sister, who were watching over her at the time. One of us at first thought it was lightning, till shortly after we fancied we perceived a sort of tremulous glimmer playing round the head of the bed; and then recollecting we had read something of a similar nature having been observed previous to dissolution, we had candles brought into the room, fearing our dear sister would perceive it, and that it might disturb the tranquillity of her last moments."

* Cyclop. Anat., Art. Eye.

An appearance of the same kind has been observed round the person and in the room of a man who fell a sacrifice to lingering disease in a remote part of the south-west of Ireland. All the witnesses agree in having seen the light, many, however, have come to the conclusion that it was altogether a supernatural appearance. Would it not be well if those educated persons who have persuaded themselves that such luminous appearances in the room, and around the person of a dying man, must of necessity be a miraculous interposition—would it not be well if those persons would pause for a moment and consider, first, whether these phenomena may not have a ready solution by reference to the established and known laws of nature; and whether, in the second place, revealed truth be not founded on a basis too firm to need, and whether it would not rather repudiate, the aid of supposed miracles, the meaning and object of which it would be no easy task to comprehend. Many of the accounts I have received of this case have been written under the influence of the firm persuasion that the light seen arose not from natural, but from supernatural causes. It is certain, however, that a luminous appearance in this instance has been by many distinctly and repeatedly observed. I have been informed by my friend Dr. Bull, who resides in Cork, that several of his acquaintance, on the truth of whose statements he could rely, went for the purpose, and saw distinctly the luminous appearances which had excited such general attention in the south of Ireland. An authentic report of this interesting phenomenon having been subsequently published by Dr. Daniel Donovan in the "Dublin Medical Press," January 15, 1840, I shall extract from his statement the most important particulars of the case. The name of the patient was Harrington, and he resided in a small but populous village on the harbour of Glandore, one of the most picturesque spots on the southern coast of Ireland. Dr. Donovan states, "I was sent for in December, 1828, to see Harrington; he had been under the care of my predecessor, and had been entered in the dispensary book as a phthisical patient, and on reference to my note-book, I find that the stethoscopic and other indications of phthisis were indubitable. He was under my care for about five years, during which time, strange to say, the symptoms continued stationary, and I had discontinued my attendance for about two years when the report became general that mysterious lights were every night seen in his cabin. The subject attracted a great deal of attention, and, like every thing else in Ireland, at once assumed a sectarian complexion; some attributing the lights to the miraculous interposition of heaven, others to the practice of the black art. Not regarding these views as offering any explanation of the mystery, I determined to subject the matter to the ordeal of my own senses, and for this purpose visited the cabin for fourteen nights, and on three nights only did I witness anything unusual; once I perceived a luminous fog resembling the Aurora Borealis; and twice I saw scintillations, like the sparkling phosphorescence sometimes exhibited by the sea infusoria. From the close scrutiny I made, I can with certainty say that no imposition was either employed or attempted." Dr. Donovan adds, "I am of opinion that the appearances which I witnessed were dependant on the presence of phosphorescent matter in the expiratory and perspiratory secretions. The property which phosphuretted hydrogen has of undergoing spontaneous ignition when brought into contact with atmospheric air is well known; and as the components of which this is made up exist in abundance in the human body, it is not outstretching the bounds of probability to suppose that it is sometimes generated in the living system."

Dr. Donovan has lately informed me that the luminous appearances were not any time visible to him on the person of the patient; the scintillations which he has described above were perceptible immediately over the head of his bed on a wall composed of stone and clay mortar. The luminous fogs passed in streams through the apartment in which the sick man lay, and on one occasion Dr. Donovan fancied that he saw a meteor, like a falling star, suddenly pass through the house. Appearances of a similar nature are said to have been seen about the person of a woman named Pallister, who died some time ago in the neighbourhood of Hull; but I have not been able to procure any well authenticated report of the phenomena.

For the following very interesting and important fact, I am indebted to my friend Dr. William Stokes:—"When I was residing in the Old Meath Hospital, a poor woman labouring under an enormous cancer of the breast was admitted. The breast was much enlarged, and presented a vast ulcer with irregular and everted edges, from all parts of which a quantity of luminous fluid was constantly poured out. Upon being asked whether she suffered much pain, she answered, "Not now, Sir, but I cannot sleep watching this sore which is on fire every night." I directed that she should send for me whenever she perceived the luminous appearance, and on that night I was summoned between ten and eleven o'clock. The lights in the ward having been then extinguished, she was sitting leaning forward, the left hand supporting the tumour, while with the right she every now and then lifted up the coverings of the ulcer to gaze on this, to her, supernatural appearance. The whole of the base and edges of the cavity phosphoresced in the strongest manner. The light was steady. I directed that the ulcer should remain open, while I retreated gradually, keeping my eyes fixed on the light, which I found distinctly visible at the end of the ward, which must have been more than twenty feet from her bed. The light within a few inches of the ulcer was sufficient to enable me to distinguish the figures on a watch dial. I have no very distinct recollection of the colour of the light, but I remember that its intensity was variable, it being on some nights much stronger than on others." Can it be that the soft halo of light, thrown around the head by the ancient masters in Scripture paintings, owes its origin to this appearance observed, but never recorded?

Of all the enumerated sources of phosphorescence in bodies inorganic or organic, to which do the facts now detailed bear the strongest and closest analogy? Decidedly, I think, to the phosphorescence generated in organic bodies at the very moment of incipient decomposition. But it will be said "Can such a state of things exist? Can any process analogous to decay take place in the human frame, whilst yet the living principle remains?" Unquestionally it may be. For what, after all, is disease? Is it not the first step made toward dissolution? Does it not imply that to a certain extent, however slight that may be, the vital property is impaired and altered, and that unless combatted by art, and stayed in its progress by the restorative power implanted in the living system, it will inevitably lead to that condition which gives to the chemical actions the ultimate mastery over the vital?

Will not this partially impaired power of vital action help to explain the cause of many of those extraordinary solid compounds and fluid secretions which during the process of disease are developed? May not a portion of the living frame be undergoing disintegration, while yet the vital functions, though with impaired energy, maintain their controlling influence over the remainder? I doubt it not, and I do believe that while the flame of life still flickeringly burns on, the diseased or injured part may be reduced to that state which in an animal matter is perfectly analogous to the first and earliest stage of decomposition; and, other conditions existing, light may be evolved precisely in the same manner as this phenomenon is produced in the dissecting-room, in burial grounds, and in marine animals during the early stage of decay.

It is not improbable, then, that all the cases of phosphorescence or luminousness to which we have referred may be reduced to one common head—to chemical actions in peculiar conditions evolving light through the instrumentality of electrical phenomena.

Hitherto few instances of phosphorescence in the higher animals have been observed, or at least recorded; no doubt a luminous appearance has been observed in the renal secretion, and in the ova of lizards, but the evolution of light from the living bodies of the higher animals has generally escaped observation. Between the facts now recorded, and the state of the body when *spontaneous combustion* takes place, there is a very striking analogy. In one case of spontaneous combustion which is related on good authority, from the person who suffered from this mysterious and, as we may justly call it dreadful, disease, a lambent flame was distinctly seen to issue; this was observed while the patient was still alive, for he lived for four days after the occurrence of the spontaneous combustion, and was able to give an accurate account of his earliest sensations. This is an important fact, and bears directly on the subject we are discussing; before internal combustion can take place, the vital property must have nearly lost its controlling influence, as already explained, and chemical action, before death, must have begun to predominate. This explanation is corroborated by another case, the details of which have been published. It is the fact of the disengagement of a gas throughout every part of the body, which became universally emphysematous; on making an incision into any part the gas escaped, which, when touched with the flame of a candle, ignited and burned with a blueish flame.

I should gladly enter upon, and detail the various recorded instances of spontaneous combustion, but it would occupy time too largely; nor is it necessary, as I can refer my hearers to an excellent and truly scientific paper on this subject written by Dr. Apjohn, and published in the "Cyclopædia of Medicine."

It appears to me in the highest degree probable that, were accurate observations made, a luminous appearance would always be discovered around or upon the persons of those in whom spontaneous combustion was taking place.

I shall conclude by describing an experiment of considerable interest, as connected with our subject which was, I believe, first performed by Magendie, and which has been lately repeated under my own inspection.

Half an ounce of olive oil, in which two grains of phosphorus were dissolved, was injected into the crural vein of a dog. Before the syringe was completely emptied, a dense white vapour began to issue from the nostrils, which became faintly luminous on the removal of the lights. An additional half ounce of phosphorated oil, of equal strength, was then injected, and the lights extinguished. The expirations immediately became beautifully luminous, resembling jets of pale coloured flame pouring forth from the nostrils of the animal. This extraordinary spectacle continued until the death of the dog, which occurred in about five minutes. In this experiment the rapid transit of the injected fluid from the vein in the remote extremity to the lungs, and its instantaneous expiration in the gaseous form, were very remarkable. The result of the experiment would also seem to shew that in some, at least, of the instances of luminous appearances referred to, the presence of phosphorus formed an element in the production of the effect.

The subject of the evolution of light from the living human subject is one which, it must be conceded, is of rare interest; it remains open for investigation, and will, I hope, be further and successfully prosecuted.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JUNE 4, 1842.

The fourth anniversary meeting of the Medical Association of Ireland was held last week in Dublin. As we find it impossible to make room for a complete report of the proceedings which took place at this important meeting of the profession in Ireland, we shall endeavour to supply the omission by recording here the opinions of the principal speakers on two capital points—viz., medical reform, and the Irish Medical Charities' Bill.

The subject of medical reform was ably discussed by the president, Mr. Carmichael, and the secretary, Dr. Maunsell, to whom the provisions of Sir James Graham's bill had been communicated. We may, therefore, assume the information furnished by Mr. Carmichael and Dr. Maunsell to be authentic.

One of the main features of the bill is the appointment of a central council to regulate and control the profession. This central council is to consist "of one of her Majesty's principal secretaries of state, of four persons (not professional) appointed by the Queen in council, of two fellows of the College of Physicians, and two members of the College of Surgeons in London, one physician and one surgeon from Edinburgh or Glasgow, and one physician and one surgeon from Dublin. The professional members of the council to be appointed by the crown, in the first instance absolutely, afterwards from a list of five nominated by the several colleges. Edinburgh and Glasgow to nominate alternately." Provision is also made that the Secretary of State shall be president.

With respect to this portion of the bill, Mr. Carmichael justly observes, that great improvements may be effected by the council, provided it consist of honest, independent, and intelligent men; he also expresses his gratification at the fact that one of her Majesty's principal secretaries of state is to be president of the council—an arrangement which will connect the government more closely with the profession than it has hitherto been, and be a means of encouraging the highest department of the healing art—viz., political medicine.

The questions of preliminary education and equality of qualification are not settled in a very satisfactory manner by Sir James Graham's bill; two grades of practitioners are instituted—the one, that of the general practitioner, whose knowledge is to be tested by an examination "in surgery and anatomy by the College of Surgeons—in medicine, midwifery, chemistry and pharmacy, by the College of Physicians, assisted by deputies, to be chosen by the Apothecaries'

Company. The course of study and nature of the examination to be accorded to a scheme agreed upon by the several colleges, and approved of by the council." The ordeal, which the other grade in the profession has to undergo, is intimated under the following head:—"Special examinations by the College of Physicians (are to be held) of those who wish to proceed to the degree of doctor of medicine, and by the College of Surgeons for the degree of *master* in surgery. A necessary condition for being admitted to this examination to be a greater age, and either an extended time of previous study, or practice for a definite time after going through *both* the ordinary examinations by the College of Physicians and the College of Surgeons."

Mr. Carmichael objects to several points included under this portion of the bill, but Dr. Maunsell appears to be well satisfied with it, because "the board of control was to be endowed with power to enforce a similar education and similar regulations for the obtaining of diplomas—for the conducting of examinations throughout all the colleges, and thus the heads of the bill tended to produce equality of education."

Equality of privileges for those equally qualified was also provided for in Sir James Graham's bill (according to Dr. Maunsell), by establishing a minimum of qualification, without possessing which no person would be considered as a medical man, or permitted to act as such in any public capacity whatsoever. We have already explained the way in which the general practitioner was proposed to be qualified. A person so qualified would be registered by the supreme council as a general practitioner, but upon no other terms could he be so registered, and thus a minimum qualification was provided which conferred an equality of rights throughout the three divisions of the empire.

Mr. Carmichael, however, observes, that the bill contains no provision to permit physicians and surgeons to officiate as general practitioners; and he sees no reason why they should not be permitted to do so (if properly qualified), whenever their interest or pleasure may lead them to adopt this line of practice.

The Apothecaries' Act of 1815 "is to be amended conformably to the proposed act"—that is, the Apothecaries' Company is to be deprived of the power to examine and license practitioners in medicine. With this power will also, we apprehend, fall the power which the company now possesses of protecting by law the duly qualified practitioner in the exercise of his art. Upon this point we regret to find ourselves in opposition to Mr. Carmichael, who thinks that Sir James Graham has *wisely* abstained from interfering with unqualified persons, because prohibitory laws can never succeed against them.

The only checks afforded by the bill are of a negative kind. Thus it is proposed to enact that "none but those registered by the central council shall be appointed to any medical or surgical office in the army, or navy, or East India service, or in any public hospital, infirmary, dispensary, workhouse, or other public institutions. Unregistered practitioners not to be entitled to the exemptions from serving on juries, &c. &c., claimed by medical men, nor shall their certificates be received in any case in which by the law the certificate of a medical man is required."

Such are some of the main provisions of Sir James Graham's bill, as explained to the association by Mr. Carmichael and Dr. Maunsell. That it was favourably received, may be concluded from the following resolution, which, we are told, was unanimously adopted:—

"That the association feel deeply indebted to Sir J. Graham for having, as minister of the crown, taken up the long-neglected subject of the regulation of the medical profession, and that the outlines of Sir J. Graham's proposed bill are satisfactory to the association, in so far as they tend to provide for equal education, an equality of privileges for those equally educated, a registration of medical practitioners, the encouragement of the scientific apothecary, and the establishment of a supreme board of control."

Upon the subject of the Irish Medical Charities' Bill, the information elicited at the meeting was of the most satisfactory kind. A deputation had waited that morning on Mr. Lucas, the under secretary of state. "Mr. Lucas stated that the government had come to a certain determination with reference to bringing in a measure of medical relief for the country. It amounted to this—that the principle would be adopted of not admitting of any measure that would be conflicting with the present poor-law in Ireland, and that, consequently, when they meant to bring in a measure affording medical relief to the poor out of the public funds of the country, those funds should be raised out of the poor-rate; that so far as the fiscal arrangements should be dovetailed into the provisions of the poor-law, the powers of the poor-law commissioners should be intact; but that the machinery of the bill should be so adapted as that the medical arrangements and general government should be in the hands of a medical board. That although there would be four powers in operation—the lord-lieutenant, the poor-law commissioners, the Medical Charities' Board, and the local governors—he would so contrive it, and their authority should be so defined, as to keep them in separate departments—keeping the interference of the poor-law commissioners to the fiscal arrangements, and that of the lord-lieutenant to the sanction of the arrangements made for the medical government under the medical board."

In these facts, which were stated to the meeting by Dr. Nugent, we find a confirmation of what we announced in our last number—viz., that the poor-law

commissioners are not to have any control over the management of the Irish medical charities. Dr. J. Jacob protested in the most energetic terms against the destructive and objectionable influence sought to be obtained by the commissioners through their bill. "When they reflected that it had been prepared (said Dr. Jacob), by Mr. Nicholls and Mr. Phelan, without any interference either from the law officers of the crown or heads of the medical profession, and that it had been actually printed without any other persons in Ireland even seeing it, they were not to wonder that it should contain the provisions to which they had so strongly to object. As a rate-payer, as one who had been a poor-law guardian, and as the medical officer of a public institution, he wished to record his opinion that the acts of the commissioners are undeserving of public confidence; and if the government persevered in supporting any of the views of the commissioners respecting the medical charities, he would enjoin on every country practitioner around him to hasten home to their respective districts, and to exert themselves to the utmost in counteracting the attempt."

Finally, Dr. Macartney, whose independence and public spirit have always placed him in the foremost rank of the defenders of the profession, proposed the following resolution, which was seconded by Dr. John Nolan, and carried unanimously:—

"That we desire to express, in the most distinct manner, our disapprobation of the measure for the regulation of the medical charities of Ireland, which has lately emanated from the poor-law office, and that we do so on the following grounds:—

"First, because, as British subjects, we can never consent to the enactment of a statute giving to a single individual the power of visiting with unlimited fine, imprisonment, and hard labour, offences against that individual's arbitrary will. Secondly, because, as Irishmen, we are unwilling to permit the last remaining tie between the rich and the poor in our country —viz., that formed by the medical charities, to be broken. And thirdly, because, as members of a profession hitherto honourable, we cannot accede to its being placed under a control which we believe must prove fatal to its honour and independence."

We have thus placed before our readers a faint outline of the principal incidents which distinguish the fourth anniversary meeting of the Medical Association of Ireland.

We also take this opportunity of stating that the annual meeting of the Provincial Association will be held, this year, at Exeter, in the first week of August.

We would willingly see some of the fire and energy exhibited by our Irish brethren infused into the proceedings of our English association. Nothing else, we sincerely believe, is wanting to crown with success the efforts of a body so numerous, united, and influential.

REVIEW,

The Theory and Practice of Midwifery. By Fleetwood Churchill, M.D. London: Renshaw, 1842. 8vo., pp. 480. Price 12s.

Of the various branches of the healing art, if we except perhaps operative surgery, there is none which admits more readily of illustration by means of plates or wood-cuts, than midwifery. The publisher of the volume now before us has taken advantage of this circumstance with the most complete success. It is impossible to conceive a more elegant or useful manual than Dr. Churchill's Practice of Midwifery, illustrated, as it is, by upwards of one hundred highly finished wood engravings by Bagg.

In a work of the present kind, destined for the student and junior practitioner, we are not to expect any novel views—any elaborate exposition of doubtful doctrines—anything, in short, beyond a clear and concise history of the practical bearings of the subject treated of. To produce a complete manual of the practice of midwifery, which, in a condensed form, contains the substance of standard works and all the more recent improvements in practice, has been the object of the author, and in the attainment of this object he has been singularly happy. The obstetrician will find all that he can require for the practice of his art in Dr. Churchill's manual, and this we conceive to be the highest merit which a manual can possess.

The treatise is divided into three parts. The first is devoted to the anatomy of the pelvis and organs of generation, and is illustrated by thirty-three engravings.

In the second part we have the physiology of the organs of generation, including the signs of death of the fœtus and abortion. Dr. Churchill has bestowed considerable pains on this portion of his work, and rendered it not only useful but extremely interesting. Twenty-four engravings are devoted to the illustration of this part.

In the third, or concluding part, we have parturition and its immediate consequences, illustrated by forty-eight engravings, which place before us the different positions of the fœtus, and the use of instruments under the various circumstances which may require their aid.

To enter into any critical examination of Dr. Churchill's views of the theory and practice of midwifery, is a task which we do not propose to undertake. We shall, therefore, give a rapid analysis of a chapter, taken at hazard, as a specimen of the manner in which he has treated his subject. Chapter VIII, for example, is devoted to "obstructed labour." We first have the definition of the term: "The progress of the labour is impeded by some mechanical obstruction in the passages, connected with the soft parts, which by causing delay in the second stage, leads to the development of the symptoms of powerless labour." After the definition, follows an account of the "symptoms," and then a statement of the causes which may obstruct labour in its second stage. These are state by the author to be "minute

or imperforate os uteri;" "carcinoma or scirrhus of the uterus;" "narrow and undilatable vagina;" "tumours in the pelvis;" "diseased ovary;" "vaginal cystocele;" "calculus;" "vaginal hernia;" "swelling of the soft parts;" "imperforate hymen;" "rigidity of the perineum;" and "collection of fæces in the rectum."

Under each cause, the symptoms produced and the treatment to be adopted are concisely described. Thus, under the head of "Vaginal Cystocele," Dr. Churchill says,—

"I have already spoken of the necessity of keeping the bladder empty, as its distension very often protracts the labour; but the effects may be more serious, if from frequent child-bearing, the posterior and inferior supports of the bladder have been weakened, for then it may overlap the brim of the pelvis, and be caught by the head of the child in its descent, and pushed before it into the cavity. Fortunately such cases are very rare, for their consequences may be very serious.

The patient will complain of fulness, tension, a feeling of pressing down and dragging, with a desire to evacuate urine frequently, and of inability to do so. On examination we detect a tumour, in front of the pelvis, partially covering the head, and containing fluid. The finger passes easily posterior to the tumour but not anteriorly, and the catheter cannot be passed in the usual direction, indicating clearly its nature. With care, there is not much danger of an incorrect diagnosis, but if not on our guard we may mistake it. Dr. Merriman relates a case where the bladder was perforated on the supposition that it was a hydrocephalic head, and Dr. Hamilton used to mention one in his lectures, where it was mistaken for the bag of the waters, and punctured.

No doubt a bladder sufficiently distended and prolapsed must occasion difficulty and delay in the second stage, but the danger to the mother from the rupture of that organ is at least equal to the risk of mischief fron the delay.

Treatment.—This double danger renders it necessary that, when we are assured of the nature of the impediment, we should be prompt in our endeavours to remedy it. A male elastic catheter must be introduced, with the point directed downwards and backwards, and if the head have not descended too low, we shall probably be successful in emptying the bladder. The head may also be raised a little with the finger during an interval to facilitate the introduction. Even if we succeed, it will be necessary to watch carefully against the effects of the previous pressure; but if we fail, and either the labour be arrested by the obstacle, or the pressure threaten a rupture, our only resource, I believe, is to tap the bladder with a very fine trocar, through the vagina. Let me, however, impress upon my junior readers the necessity of being quite certain of the nature of the case, and of the prolapsed bladder being really an impediment, or in danger of rupture, before attempting so serious an operation.

Should the quantity of urine be moderate, and the pressure not excessive, and especially if the head of the child be small, the case may, perhaps, be left to nature; but then, after the labour is over, we must immediately evacuate the bladder, and watch the patient carefully."

This plan has been followed out by the author in the other chapters of his work, and gives rise to an order and clearness of exposition which add considerably to its value.

Another feature of this manual, which we must not pass over in silence, is the statistical tables collected by Dr. Churchill, and employed by him to illustrate the frequency and relative mortality of the deviations from natural labour, and of the different operations; they reflect much credit on the industry of the author, and may be referred to with advantage for the solution of several questions interesting to the obstetrical practitioner.

To conclude, we would strongly recommend Dr. Churchill's manual of midwifery to the attention of our readers; the letter-press contains all that the practical man can desire; the illustrations are numerous, well chosen, and of the most elegant description; and the work has been brought out at a moderate price, which brings it within the reach of every practitioner in the United Kingdom.

ACADEMY OF SCIENCES, PARIS.

May 23.

CONTAGION OF CANCER.

M. Tanchou read a memoir on the nature of cancer, considered as a contagious disease. Medical men regard the complaint as not being contagious; and if they employ the term "cancerous virus," it is rather for the purpose of explaining its reproduction and diffusion throughout the economy, than with reference to its contagiousness. The experiments of M. Tanchou confirm the generally entertained opinion. He took the matter from open cancers of patients at Salpetriere, and introduced it into divers parts of their bodies, without producing the slightest effect. Dogs were also inoculated with matter taken from a cancer of the breast; they were ill for a short time, and seemed on the point of dying, but the wounds healed like common incised wounds.

STRICTURE OF THE URETHRA.

M. Civiale presented some additional observations on stricture of the urethra, founded chiefly on post-mortem examinations. The first point which he notices is the difficulty and danger of catheterism in cases where the stricture is complicated with disease of the prostate or neck of the bladder, giving rise to deviation, &c., of the posterior portion of the urethra. On examining a great number of pathological preparations, he has been convinced that it is almost always impossible to reach the bladder with the catheter commonly employed, without making a false passage.

The second point refers to the effects of stricture on the parts seated posteriorly to it. A knowledge of these effects, says M. Civiale, is of the greatest assistance to us in the diagnosis of stricture. They are, first, inflammation of the mucous membrane; second, abscess in the walls of the urethra; third, formation of cellules or sacs in the urethra; fourth, lacerations of the canal; fifth, lesions of the prostate; sixth, various diseases of the genito-urinary organs. Another point to which M. Civiale especially directs the attention of practitioners is, that the effects of stricture on the urethra will be considerably modified according as the bladder is or is not hypertrophied.

ANALYSIS OF SULPHUREOUS MINERAL WATERS.

M. Dumas presented, in the name of M. V. Gerdy, a memoir on a method of determining with the utmost

nicety the quantities of sulphurets, sulphates, and of hydro-sulphuric acid, contained either singly, or combined in mineral waters.

ACADEMY OF MEDICINE, PARIS.

May 24.

PULMONARY EMPHYSEMA AS A CAUSE OF DEATH.

M. Prus concluded a memoir on this subject. Notwithstanding the numerous researches of Laennec, Stokes, Louis, and many others, there are several points connected with the history of pulmonary emphysema which are still obscure; but the author wishes to confine himself to the question whether emphysema is capable of producing death or not.

Laennec and M. Louis declare that pulmonary emphysema never occasions death; other writers are of a different opinion. We must, therefore, appeal to facts, and the question is one of much importance in a medico-legal point of view. The only cases, as yet published, of death from emphysema are two related by Magendie and Ollivier d'Angers; M. Prus has observed eight cases of the same kind. He alludes to the case of a man found dead on a road; the physician appointed to examine the body could discover no other lesion but pulmonary emphysema. Being unwilling to decide the question of the cause of death himself, and finding nothing relative to it in works on medical jurisprudence, he wrote to a friend in Paris to know whether the question had been decided, and received an answer in the negative. M. Prus, therefore, hopes that his researches may serve as a foundation for the settlement of the question. The author commences by showing that the term pulmonary emphysema should be confined to the presence of air in the cellular tissue between the pulmonary vesicles, in that between the lobules, or under the pleura; these constitute three degrees of the same malady. Dilatation of the pulmonary vesicles, if it ever exist, is extremely rare. Having carefully established the distinction between asthma and emphysema, the author discusses the cases which he has collected, and furnishes a complete history of the symptoms and pathological appearances observed in persons affected with the disease in a degree capable of producing death. He points out a fact, not hitherto noticed, that the blood of persons cut off by emphysema is always black, fluid, and of an oily consistence. The following are the principal conclusions drawn by the author:—

Pulmonary emphysema has its seat in the intervesicular, interlobular, or sub-pleural cellular tissue.

It may occasion death by a chronic process; this is the aërial phthisis of Stoerk. It may occasion sudden death; and it is cases of this kind which require the attention of the medical jurist.

ROYAL BERKSHIRE HOSPITAL.

[*Practice of Mr. F. A. Bulley.*]

BURNS FROM CLOTHES CATCHING FIRE—DEATH—POST-MORTEM INSPECTION.

Mary Ann Barnett, aged five years, was admitted into the hospital, April 13th, 1842, on account of a severe burn, which extended completely over the face and neck, and down the fore part of each arm as far as the wrists. About the elbow-joint of the right arm the injury included the whole r cumference of the limb, and here the parts were apparently more severely burnt than elsewhere. The various parts of the burnt surface presented the different degrees of injury commonly observed, from simple vesication and redness of the integument to the entire destruction of the skin and cellular membrane, and on some parts of the denuded surface the fascia had become exposed, and was of a blueish tint and sloughy appearance. The accident had happened two or three days prior to admission, and flour or powdered starch had been thickly applied to the burnt parts. On removing the powder, I found the integument covering the entire face destroyed, exposing the cellular membrane underneath, the endeavour to remove it causing the dead skin to separate and peel off, and there was a slightly granulating appearance of the surface. The eyelids were closed, adherent, and had a sodden-blueish appearance, as if they had been destroyed by the burn, and would ultimately slough through their whole substance, and on touching them there was no movement of contraction which would lead me to suppose that they still retained their vitality. The tip of the nose was rather more deeply burnt than the rest of the face; she had dyspnœa and considerable constitutional disturbance; tongue extremely white; pulse quick and thrilling; she is constantly crying out for drink. Lint soaked in a lotion composed of equal parts of treacle and water warmed, to be continually applied to the burnt surface, and if restless to have a little syrup of poppies at night.

April 14. Has passed a tolerably comfortable night. Her father thinks she is altogether less restless than before the application of the treacle; in fact, she is more drowsy to-day than otherwise, and she has occasionally slight startings in her sleep; the fever and thirst continue; stertorous breathing. Saline mixture twice in the day.

15. Has had rather a more restless night, but is quieter this morning; bowels confined. To have some castor oil occasionally.

18. Diarrhœa has taken the place of the constipation; the fever and constitutional disturbance seem to be declining; a slightly tremulous movement of the orbicular muscle of the eyelids for the first time since the accident. Compound chalk powder, with opium, eight grains, to be taken every fourth hour.

19. The eyelids have opened a little this morning, exposing the corneæ, which have a hazy dullish appearance. The nurse thinks she has, however, no vision. The progress of the burn is in every respect favourable, the surface generally, with the exception of the right arm, having assumed a healthy granulating appearance, and she seems to suffer very little inconvenience from the exposure of the part. The right arm is hard and œdematous, and the burnt surface at this part is of rather a more pallid colour than the rest; still some difficulty in the breathing. Continue remedies.

26. The burnt surface generally has an improving appearance, being now covered with healthy granulations; the right arm, however, has not progressed in proportion with the rest, the partially disorganised skin which covers it having a pale and sodden appearance, and being indisposed to separate; the granula-

tions about this part are also paler than elsewhere; still feverish, with occasional attacks of difficult breathing. As the appetite had returned, I ordered her to have some meat daily, in the hope that the restoration of her general strength might produce the detachment of the apparently disorganised integument upon the arm, which was now the only part of the local injury which caused me any anxiety. I soon, however, perceived that any attempt of this kind produced an increase of the constitutional disturbance, and apparently a tendency to metastatic inflammation, which had hitherto, since she had been in the hospital, been pretty well kept down, and I was obliged to discontinue it—at least, to give her very small quantities of food at a time. The eyes have gradually assumed a healthy clear appearance, with perfect vision, and the lids are freely movable over their surface. The integument covering the eyelids has become detached, leaving the structures underneath uninjured.

30. Is in much the same state as last report; rather less fever. To have a little beer daily.

May 4. The burnt surface generally, with the exception of the arm, is proceeding favourably, and cicatrisation has extended from several parts of the margin of the wounds. The arm is, however, puffed and swelled, apparently from effusion underneath the partially destroyed integument, which stills shows no disposition either to recover itself or to separate from the parts beneath. To have a small quantity of port wine daily.

May 6. The patient has been declining daily since the last report, restlessness and the constitutional disturbance having increased. This morning, on going into the ward, I heard from the nurse that she had passed the early part of the night in a very unquiet manner, and that she died about four o'clock this morning, exactly three weeks and two days after the receipt of the injury.

Post-mortem Inspection Twenty-four Hours after Death.—The surface which had been denuded by the burn had assumed a healthy, even, and granulating appearance, with the exception of that portion of it which occupied the intermediate space between the elbow and the wrist joints of the right arm, at which part there was a great thickening of the integument, and a feeling as if an effusion of serum had taken place beneath it. There seemed to be no disposition to a separation of the injured skin. The granulations above this part of the arm were not so florid as elsewhere. On cutting into the swelled and thickened integument below the elbow, it was found to have assumed a hard and horny state, and did not seem to have been entirely disorganised by the burn. A considerable quantity of serous fluid, with which the altered structure was extensively infiltrated, oozed from the incisions which were made in it. There was no serum in the cellular membrane beneath.

The lungs were to all appearance healthy, crepitating freely on pressure, and showing no signs of recent bronchial inflammation. There was an adhesion of the upper part of the right lung to the side of the thoracic cavity, which had apparently resulted from inflammation at an early period of the accident, inasmuch as there were no traces of recent inflammation on either of the pleural surfaces. About a pint and a half of straw-coloured serum was contained in the cavity of the thorax; the viscera generally had a bloodless appearance; what blood remained in the heart and larger vessels was of a dark colour and thick consistence; the left auricle and ventricle were filled with a yellow gelatinous concretion; the stomach and intestines offered no signs of either recent or former inflammation, and had a flabby attenuated appearance. The head was not examined.

REMARKS.

I have recorded the foregoing case, chiefly because the post-mortem appearances differed in some measure from those which are usually observed after death from similar injuries. The existence of hydrothorax is, I believe, not a very common circumstance, as arising remotely from a burn in a young child; at least, I have never seen this occurrence so long after such an accident, when all the signs of acute pleuritic inflammation had subsided, and in this case they had, indeed, never been very distinct. There is no doubt, however, that in the very earliest period of the present case a degree of simultaneous or metastatic inflammation had ensued in the bronchial tubes, or in the pleura covering the lungs, although the signs of such inflammation were but imperfectly recognisable at the time the patient was admitted into the hospital; the acute inflammation had then, most probably, subsided, leaving a chronic state of congestion of the pleural membranes, which, together with the debility induced by the shock of the accident and subsequently, had favoured a gradual transudation of serum into the thoracic cavity. It is, however, reasonable to suppose, from the entire absence of cough during the whole period of the patient's sufferings, that the bronchial tubes were never materially affected, but that death was the direct result of a metastatic inflammation of the pleura which had assumed a chronic form.

The treatment pursued was in accordance with that which I have lately successfully adopted in similar cases—namely, the constant and unremitting application of treacle and water to the whole of the denuded surface; and, notwithstanding the result of this case was unfavourable, the failure was not attributable to any want of efficacy in the topical remedy, but to other more remote and uncontrollable effects of the injury, so that I am still disposed to hold the same opinion respecting it, as a safe and efficacious means of treatment in such cases. The post-mortem appearances showed that, as far as the local injury was concerned, the progressive improvement which had been made was considerable, and that, with the exception of the arm, cicatrisation had proceeded in all parts very satisfactorily, and I had great hopes at one time that the case, unpromising as it seemed to be, would ultimately terminate well. It may be said, perhaps, that the application was not sufficiently stimulating to that part of the arm where the integument was apparently destroyed, but remained adherent, and that it was not calculated to favour its separation from the parts beneath, which is the object of applications commonly made use of. To this I may answer, that it would have been the same if any other application had been used, under the circumstances of the enfeebled condition of the system, which had resulted from the great shock it had sustained. It would be like what is seen in cachectic diseases generally, where

the most stimulating applications fail to produce a separation of the sloughs which occur in bad sores, until the general powers of life have been restored to a more healthy standard, so that in this respect it was at least as good an application as any other.

I have now used this remedy in a considerable number of cases, but I have never tested its efficacy in so severe a one as that I have related; and from all I have observed, both in this case and in others in which I have tried it, I am determined to persevere in using it, at least in such cases as may seem to be suited for its employment.

Perhaps this remedy may be more generally applicable in the less severe instances of burn, than in those where the integument and structures underneath have been extensively destroyed, either by the immediate operation of the burn or its progress afterwards. In such cases I should not be disposed to place my whole reliance on these means, unless I had an opportunity of seeing the case before the destruction of the parts had become completely defined. To ensure its beneficial effects, it is necessary to apply it as quickly as possible after the receipt of the injury. Experience and daily observation show that, in many cases of this kind, disorganisation does not take place at once, but is a progressive process; and if a case of this kind be carefully watched from the beginning, it will be found that, at first, the burnt parts are of a bright red colour, not absolutely destroyed, but in a state of high destructive inflammation. At some varying time after the accident, the parts assume a darker colour, and continue to get darker and darker until their vitality appears to be, and may be said to be, destroyed. It is, therefore, only in the earlier stages of the accident that this remedy is fairly applicable, when on most of the occasions in which I have employed it, it has seemed to check the inflammation, and so prevent the destructive process. It seems, as it were, to act as a direct sedative, almost immediately allaying the excessive irritability of the denuded surface, and the patients generally express themselves as receiving great comfort from the application.

It must be understood that I do not recommend this remedy for any novelty in its mode of action or effect, but simply as a more manageable substitute for the soothing applications now in use, in contradistinction to the stimulating treatment, which cannot but be injurious, as hastening the progressive destruction of parts in such cases as I have described. I imagine, also, it has some superiority over those applications which are commonly employed as defensatives for the exclusion of the air; it answers this purpose fully, being applied on lint to the general surface; it is easily removed and renewed, and is not liable to the fœtid, purulent discharge saturating it, as in the case of flour and cotton, and other similar applications, which occasion great pain in the removal, and, moreover, obscure the view of the cicatrising process underneath.

I suggest it, therefore, as a sedative and defensative remedy of a simple kind and of easy application, and as far as my own experience goes, as one, which if used early in the treatment, seems to have the effect of checking, in some measure, the disorganising process, and subsequently of producing a smooth and unpuckered cicatrix, and so preventing, to a great degree, the lamentable consequences of contraction of articulations, which have been unfortunately involved in the injury.

In many of the cases which I have had an opportunity of observing, the puckers and bands in the new cicatrix seem to have resulted from the following cause:—By the application of stimulating remedies to a burnt surface, while the system is under the influence of the shock of the accident, a large quantity of feebly organised granulations are made to spring up upon the surface, giving it an uneven rough appearance.

It is seen oftentimes in these cases that the more feebly organised these granulations appear to be, the more exuberantly they are produced; and thus, in a short time, they rise considerably above the surface of the wound. As these exuberant granulations are the result of an increased local action without corresponding systemic vigour, it is found exceedingly difficult to repress them (at least without the application of more powerful remedies than it would be safe to apply to them in some cases), and thus, when the system is beginning to recover from the shock, and vessels shoot into these granulations, which seem to me to be at first nothing more than coagulated lymph, resulting from increased local action induced by the stimulating remedies, the irregular cicatrisation commences; and thus is laid the foundation of these integumentary bands which so often disfigure the patient.

It was with a view, therefore, to prevent this result, that I was induced to try the application of treacle and water as a lotion in these troublesome cases, under the impression that it is by retarding (as I imagine this remedy has the power of assisting in doing), rather than by trying to accelerate, the healing process before the system has recovered from the shock, that we have the best chance of obtaining a favourable termination.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.

The first anniversary dinner of the governors and subscribers to this institution took place on Wednesday evening last, and was very well attended. The chair was filled by his Royal Highness the Duke of Cambridge, supported by a long list of noble and gentle stewards. After the cloth had been removed, the report was read by the secretary, from which it appeared that, though the charity had been in existence only a twelvemonth, its funds were in a most flourishing condition, insomuch that the committee of management had felt itself authorised to take a lease of Manor House, Chelsea, to be opened as a hospital on the 1st of July next. It will contain thirty beds. The Bishop of Winchester, the Earl of Eldon, the Rev. Robert Montgomery, and Dr. Forbes, afterwards addressed the meeting, and pointed out the necessity for such an institution, and the good that must result from its establishment both to the public and to the profession. An appeal was made in its behalf, which was immediately responded to by donations amounting to £1,000. The meeting did not separate till a late hour.

RETROSPECT OF THE MEDICAL SCIENCES.

RADICAL CURE OF HERNIA.

Dr. Heidenreich, of Ambach, says that he has radically cured fifty cases of simple hernia with the osmunda regalis, according to the method of P. Simon. He digests two drachms of the coarsely powdered root of the plant in a pint of wine for eight days, the whole of the tincture thus prepared being administered at two doses in one day. In cases of necessity he uses the entire plant, instead of restricting himself to the root only. At the same time he gives a small spoonful of the powder of the plant twice a-day. To those who cannot bear wine, an aqueous infusion is given. On the hernial aperture he applies compresses soaked with the following decoction, and kept in situ by a band. Radicis tormentillæ, two and a half ounces; gallarum, ten drachms; radicis calami aromatici, ten drachms; aquæ, two pints. Boil for eight or ten minutes, and filter. M. Heidenreich occasionally wets the compresses with an ammoniacal solution, and, if it cause phlogosis, has recourse to Goulard's extract or lead ointment to remove it. In one of the cases the osmunda cured an habitual diarrhœa of long standing. Dioscorides attributes similar virtues to the osmunda lunaria of Linnæus.—*Medicinische Correspondentzblatt Bayenrischer Aerzte.*

HARE-LIP.

Dr. Houston has detailed in the "Dublin Journal of Medical Science," two cases of hare-lip, in which he operated, introducing a modification of the proceeding generally adopted. The first case was a very troublesome one; the patient, a child two years and a half old, having a double hare-lip, with double fissure of the hard palate anteriorly, but only one in the soft palate. The incisor teeth were distorted. The operation was performed a few days after the child had been admitted into the hospital. The first step was, detaching the edges of the labial fissure from the bones by an incision with a scalpel through the mucous membrane, after which the outer layer of the projecting tubercle of bone was removed by nippers, and the distorted teeth, together with the pulps of the secondary ones, were also taken away, thus making a flat surface and support for the new lip. The edges of the hare-lip were then pared with strong, sharp scissors; there was but little hæmorrhage. The needles employed to bring the wounds together were two long, fine, woollen or darning needles, tempered and filed at the points to the shape of glovers' needles. The lower was that introduced first; the point was made to penetrate the skin on the left side, about a line above the free edge, and two lines and a half to the outside of the vertical incision. Thence it was pushed slightly upwards and backwards, so as to appear on the cut surface a little higher than the level of its entrance. It was then pushed through the opposite side in a similar, but reversed order, and brought out there, at a point of the skin exactly opposite to the point of entrance. The two flaps glided readily towards each other on the long, smooth needle, and when made to touch were found to fit with every exactitude, giving to the red border a straight edge below, and forming the lip into a level surface in front. The manœuvre of raising the point of the needle during its entrance ensured a firmer hold of the flesh, and, by pulling down the mucous membrane a little, added to the fulness of the lip at that part. The second needle was then introduced in a direction parallel to the first. It entered the skin close under the left nostril, passed through about half the thickness of the flesh of the lip, then traversed the central triangular piece, and came out again under the right nostril. This needle was introduced in a directly transverse course, and not in an arched direction, as practised with the preceding one; and it was not allowed to pass altogether so deeply into the substance of the lip, as by such a disposition a better seat was given to the central tubercle. A high position was selected for this needle, with the view of closing the fissure into the right nostril as far as possible. Both needles being thus laid in, a thread of silk was twisted several times, first round the upper one and then another round the lower, as in the figure of 8, and both were made subsequently to cross in the centre between the needles, so as to keep the apex of the tubercle in its place, care being taken, however, not to pull them in any degree calculated to approximate the needles to each other. It was found that, by tying the superior needle first, a better adaptation of all the parts of the complicated wound, and a neater arrangement of the red borders, was accomplished than could be by the more usual mode—that, indeed, first attempted—of securing the lower needle as the primary step in the approximation. The peculiar length of the needles, by lessening their readiness to fall out of the wound, facilitated greatly the subsequent manipulations of the dressings, and rendered unnecessary the application of a ligature in either of them until the fitting place and direction for both had been determined upon. As final steps, the projecting ends of the needles were nipped off, little rolls of sticking plaster were applied to their stumps, and the cheeks were drawn and held forwards by adhesive straps, so as to take off all stress from the needles. No further dressings were applied. In seventy-two hours the dressings and needles were removed, when the union between the wounded surfaces was found to be complete in every part, so as to give a perfectly straight edge to the red border below, and superiorly to close the right fissure a little way inside the nostril. The child left the hospital about a fortnight afterwards, perfectly cured, and with the unseemly breadth of the nose much reduced. The palatine fissures were left untouched. The operation was similarly performed in the other case, one of single hare-lip with double palatine fissures.

Dr. Houston afterwards examines the question as to what period of life is the best fitted for the performance of an operation for the cure of hare-lip, and he decides in favour of the third month after birth, urging as his reasons that the parts recover themselves better than when the operation is done later in life; that the lip in due time acquires fulness and pliancy; the nose is prevented from assuming a spread-out, ugly appearance; the fissure in the palate, if there be any, closes greatly with the growth, if supported by a firm and perfect lip; bad habits of speaking, such as

nasal or guttural utterance, which, if once established, become irremediable, are avoided; and by removing such disfiguration before the child is conscious of its existence, it is spared the feelings of humiliation which the consciousness of such infirmity necessarily imparts, and which invariably gives a tone to the character of the individual. He states that he has operated on several infants of three months old, with equal success in all the cases, and has never failed. Dupuytren also recommended the third month, Velpeau the first six, but if they had already passed, he then deferred operating until the tenth or fifteenth year. Sir A. Cooper advised waiting until the patient had completed the second year of existence.

DIARRHŒA ADIPOSA.

A certain quantity, sometimes it has been a *large* quantity, of oil, of liquid fat, has been poured forth in a sort of diarrhœa. Tulpius mentions the case of a woman, who for fourteen months discharged every day a considerable quantity of yellow fat, that lay upon the fæces like melted butter. When voided into a vessel of water it floated, like oil, upon the surface, and when cold it assumed the consistence and appearance of fat. Like fat, it was very inflammable, and burned with a bright flame. With all this there was not any kind of distress, nor wasting of the body; the patient was in excellent health sixteen years afterwards. Dr. Prout and Dr. Faraday analysed this substance in a similar case under the care of Dr. Elliotson, and pronounced it to be genuine fat. Dr. Bright mentions three cases, and Mr. Lloyd one, in which this singular symptom was accompanied with scirrhous disease of the pancreas and duodenum, forming at least a remarkable coincidence. Dr. Prout says, that in cases in which a similar oily fluid has passed through the urethra, the kidneys have been found in a state of malignant organic disease.—*Dr. Watson.*

TESTS FOR ARSENIC.

Mr. Rodgers, at a recent meeting of the Royal Medico-Botanical Society, mentioned the following tests for arsenic:—The galvanic test was first proposed by the German chemists, who employed a simple apparatus, similar to that used for electrotype purposes, placing the suspected solution in the inner vessel, and a solution of hydrochlorate of ammonia in the outer; they then put a piece of zinc in the outer vessel, and bent a platinum wire (attached to the zinc) so as to dip into the inner one. In the course of a few hours the arsenic was deposited on the wire. When a small galvanic trough was used they found the metal deposited more quickly.

Mr. E. Davy has proposed a different method of applying this galvanic test. He recommends the suspected solution, acidulated with hydrochloric acid, to be placed in a platinum vessel with a piece of zinc. The metallic arsenic is thrown down on the platinum, from which it may be obtained in the form of arsenic by the application of heat, and then tested in the usual way.

This test is not so delicate as others, for Buchner and Pleischl state that only one-eighth to one-fourth of the arsenic present can be thus obtained; the latter chemist adds, that in an experiment made for the purpose of ascertaining the delicacy of this test, he could not obtain any arsenical indications, while he succeeded with Rose's method. The principal source of the loss of arsenic is caused by the disposition of that metal to form components with hydrogen.

The method of using the galvanic test lately brought forward by Captain Powell and Mr. H. Reece, where the arsenious acid is combined with potass, and copper electrodes employed, is (if the deposition of the metal be *alone* regarded) subject to more objections than the other methods; for the arsenic is present in a salt, and, *as the electro-negative* compound of that salt, it is, by the primary result of the electric power, forced to the positive electrode, while it is required to be present at the negative, to be reduced by the latent hydrogen. That this actually occurs, is proved by the formation of the arsenite of copper on the positive electrode. Indeed, this takes place when there has not been any deposition of the metal on the negative, and constitutes, in fact, a more delicate test, the value of which appears to have been lost sight of. In addition to the loss of arsenic by the formation of the arsenite of copper, there is still the loss occasioned by the formation of the arseniurets of hydrogen. This method, although an extremely elegant experiment, cannot be regarded, therefore, as calculated to supersede Marsh's or the other methods of detecting arsenic.

THE SENSE OF TASTE.

A too acute sense of taste is a sign of disturbance of the nervous system; accordingly, in fevers it indicates a transition to the nervous form, and occurs in hysteria and hypochondriasis. Want of taste is often the consequence of a thick coating of the tongue, as in gastric diseases, more especially gastric catarrhs; or, where this coating of the tongue is wanting, it arises from irritation, from a plethoric state of the brain, as in many febrile states, particularly those accompanied with delirium, in typhus, putrid fever, in mental diseases, and lastly, in apoplexy. If the sense of taste does not return on convalescence, a relapse of the disease is to be dreaded; and in gastric fevers, particularly those of an intermittent form, dropsy is to be apprehended.

Depravation of taste seldom proceeds from the nervous system, as in hysteria, in the nervous stage of fever, in the epileptic paroxysm; then the patient finds an agreeable taste in things which have a disagreeable one, and *vice versâ*, but has not the same sensation of taste from all kinds of food, without, however, deriving any enjoyment. This is, on the contrary, the case where the depravation proceeds from the secretion of the lingual, intestinal, and respiratory mucous membrane.

The insipid taste belongs to catarrh, to inflammation of the respiratory and gastric mucous membrane; it is accordingly observed in the case of worms, in intermittent fevers, and in consumption. Its disappearance with the occurrence of crisis is favourable; its long continuance gives reason to dread degenerescence of the bowels, or a chronic course of fever. If it still continue after the termination of the disease, there is reason to apprehend a return of the same, or dropsy.

The bitter taste is a sign of irritation or inflammation of the duodenum, and of most diseases of the liver. It sometimes accompanies intermittent fever. In pulmonic inflammation it occasionally renders the prognosis suspicious, inasmuch as it indicates a par-

ticipation of the liver as well as of the pleura. If it continue for a long time in chronic diseases, degenerescence of the liver is mostly present. If it appear in the morning, and disappear as soon as the individual has eaten something, it can scarcely be called a morbid taste.

An acid taste accompanies irritation of the stomach, and is mostly combined with heartburn, acid eructations, &c. If it continue long, there is reason to dread induration, softening, cancer of the stomach, hardening, suppuration, degenerescence, and hypertrophy of the liver, particularly of the left lobe.

A salt taste is commonly occasioned on the tongue, through the secretions of the bronchial mucous membrane; it accordingly appears in pulmonary consumption, even in its first stage.

The sweet taste is one of the more common delusions of taste in hysteria, hypochondriasis, and nervous fever. Besides these cases, where it seems to proceed from the nervous system, it is a symptom of diabetes, of impending coughing, and vomiting of blood, and of softening of pulmonary tubercles. It is a bad sign in pulmonary consumption.

A foul or even a putrid taste is sometimes occasioned by morbid states of the mouth, jaws, throat, nose, more especially caries and ulcers, and accordingly occurs in syphilis and scurvy; sometimes it proceeds from the intestinal canal in cancerous ulceration of the stomach, in gangrene of the intestines, in abscesses which discharge themselves into the alimentary canal, in ileus, and in putrid fever; lastly, the foul taste is observed in gangrene of the lungs, in abscesses, in softened pulmonary tubercles, and in chronic bronchial catarrh. Accordingly, in chronic diseases, and where it is observed in inflammations, with remission of the febrile phenomena, and the occurrence of debility, the foul taste is of unfavourable import.

The urinous taste takes place through long-continued ischuria, and in lithiasis it yields an unfavourable prognosis.

The metallic taste is occasioned by the action of metals on the system; accordingly, when mercury is administered, it is the precursor of salivation. Hysteria and hypochondriasis sometimes produce it; it also precedes severe epileptic attacks. It is observed in many intermittent fevers; if it continue during the intermission, new paroxysms may be apprehended.—*Schill's Semeiology, translated by Dr. Spillan.*

PHYSICAL SIGNS OF TUBERCLES.

Percussion will generally give earlier indications of tubercles than auscultation will. The duller or more raised stroke sound, under a clavicle, in the top of the axilla, or on the spine of the scapula, is often the earliest sign. With it, or soon after it, there may occur defective, tubular, or rough inspiratory sound; distinct, prolonged, rough, vibrating, or crackling expiration; with submucous, subcrepitant, or sibilant rhonchi; increased vocal fremitus; and, in cases of more extensive deposit, irregular or imperfect movements of that part of the chest during the respiratory actions. In practising percussion in nervous subjects, we often find that the stroke excites cough, particularly on the more diseased side. It is possible that such an effect might ensue from mere neuralgic sensibility; but I do not remember to have met with an instance of chronic affection in which it was not accompanied by signs of partial consolidation of the lung.—*Dr. C. J. B. Williams, Medical Gazette.*

THE CHIEGO.

This insect, known to naturalists by the name of "pulex penetrans," consists of two species, the black and the white, in the natural history of which there does not appear to be any difference. It is found in the West Indies in stables, kitchens, and on the ground in the open air in dry weather, which is the season it mostly prevails in—that is, from December to July. It attaches itself to the feet of those who walk about barefooted, and those whose occupations are in kitchens, abounding in ashes and filth. Its attacks are not confined to the human species; cats, dogs, sheep, and pigs, being also subject thereto.

The parts of the body it is found in are the soles of the feet and toes, and occasionally the fingers. It insinuates itself underneath the skin, and there deposits its eggs in a tough, gelatinous nidus. Attention is first drawn to the presence of these insects by a gentle itching, which, as the insect insinuates itself deeper, and the nidus begins to grow, becomes in a few days less tolerable. The nidus, containing longish shaped, white, gelatinous eggs, is a cyst of a tough membrane, and arrives sometimes to the size of a pea before the eggs are hatched, after which the new being likewise insinuates itself under the skin; so that in those who neglect extracting them, there are clusters buried under the skin of the soles of the feet and toes, which raise it in little round eminences, and create irritable sores, oozing serous fluid, and ultimately intractable ulcers. The black gigger or chiego is considered to be poisonous; it produces more malignant sores. The treatment consists simply of extraction with a needle, at which the negroes are very expert.—*Mr. Roberts, Medical Gazette.*

STATISTICS OF PHTHISIS.

Dr. Hughes has collected a series of cases of phthisis observed by himself, from which he obtains the following statistics:—The number of cases is 250, of which 175 were males and 75 females; of these there were 203, of which 138 were men and 65 women, whose chests were only explored during life. The remaining 48, of which 37 were men and 11 women, were examined after death. Of these, the left side was chiefly diseased in 116 cases, or 46 per cent.; the right in 89, or 36 per cent.; the more diseased side was doubtful in 45 cases, or 18 per cent. Of the 116 cases on the left side, there were 76 males, 43 per cent., 40 females, 53 per cent.; of the 89 cases on the right side, there were 66 males, 38 per cent., 23 females, 30 per cent.; of the 45 cases in which the more diseased side was doubtful there were 33 males, 19 per cent., 12 females, 16 per cent. Of the 48 cases examined after death, of which 11 only were females and 37 males, the tubercles were confined to the left lung in 3 males and 1 female, and to the right lung in 1 male only. From this it appears that there is a somewhat greater liability to tubercular action on the left side of the chest than on the right.

Of these 250 cases, the upper lobe of one or both lungs was solely or principally diseased in 237, or 95 per cent. Of the 13 remaining cases, of which 11 occurred in males and only 2 in females, there were 9, or 3 and 3-5ths per cent. of the whole number, in which

both lungs were universally and uniformly diseased; of these, 8 were males and 1 was a female; of the remaining 4 cases, the upper lobe in 3 was at least equally affected with other parts, and in the fourth the tubercles were deposited in the base, and were not found in the upper part of the lung. This last case was that of a poor boy, who had large opaque tubercles in the peritoneum, diseased mesenteric glands, fœcal abscess from ulceration of the intestine, chronic bronchitis, a few tubercles in the right lung, suppurating bronchial glands, and at the base of the left lung largely dilated bronchial tubes filled with purulent mucus, and chronic pneumonia. There were also in the same part a few transparent tubercles, and in one portion, about as large as a walnut and not consolidated by pneumonia, there were several of these bodies, which were larger and perfectly opaque. Tubercles are deposited first in the upper part of the lung in the proportion of 94 per cent.

After puberty, phthisis is most generally fatal between the ages of 20 and 30; next, between 30 and 40; then between 40 and 50; below 20 and above 50 the mortality from this disease is very much diminished. Fewer females than males affected with this disease attain the age of 40; in other words, women die of consumption at rather an earlier age than men. Dr. Hughes states further, that tubercles may be simultaneously deposited throughout both lungs, and may then present no other physical signs than those of bronchitis, but this form, which is comparatively very rare, is not necessarily acute, and confined to young persons.—*Guy's Hospital Reports.*

CONTUSIONS OF MUSCLES.

Having curtailed a passage in Mr. Allison's paper on this subject, in our last number, which rendered its object somewhat obscure, we have received a note from him containing the following passage:—

"What I meant to show was, 'that after the inflammatory stage is over, we often trust too long to a trifling extension and fatigue of rigid muscles, by directing the patient to keep a limb in one position, to carry weights, &c., instead of resorting to pullies sooner, to produce a more complete extension of the muscles, and to effect an earlier restoration of the use of the limb.'"

OBITUARY.

On the 26th of May, at Liverpool, after a few days illness, David Baird, M.D., one of the junior physicians of the infirmary of that town. Dr. Baird had recently commenced a course of clinical lectures, which promised to be very creditable to himself, and of great advantage to the rising generation of the medical profession in Liverpool and its neighbourhood.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted on Friday, May 27, 1842.

Thomas Sutfield Rising, James Walsh, Ambrose Willy, William Barclay Browne Scriven, William Samuel Jones, Richard Walsh, John Kilroy, Frederick R. Spackman, Edward Mc Donnell, John Drummond, John Vondy.

Monday, May 30, 1842.

Henry Sutton Lyford, Stephen Orton Lane, Thomas Bernard Ryan, Thomas Esmond White, Thomas Upton Nutt, John Simpson Rutter, George Senior, Edmonds Robert Richardson, William Marwood Kelly, John Broadhurst, Richard Tomkinson.

APOTHECARIES' HALL.

Licentiates admitted Thursday, May 19, 1842.

W. G. Walker, East Bourne, Sussex; C. N. Cissmore; R. Ransom, Cambridge; F. Ranger, Cranbrook, Kent; J. W. Maltby, North Shields; T. J. Austin, London; G. M. Phillips, Eardsley, Herefordshire; J. H. Greenwood, Manchester; W. G. Watt, Deal; J. J. Davies; A. N. Jones, Cheltenham.

Sir Robert Chermside has been made a Knight of the Legion of Honour by his Majesty the King of the French. Sir Robert is a respectable practitioner in Paris, of whom most of our readers have now heard for the first time.

Dr. Nugent has been commissioned by the Medical Association of Ireland to proceed to London, and there act as their representative during the progress of the Irish Charities' Bill.

TO CORRESPONDENTS.

T. B., Wolverhampton.—The errors alluded to consist in misapprehension on the part of *T. B.* The word *or* was used as equivalent to "and." The word (nitrogen) after ammonia indicates not that ammonia and nitrogen are the same substances, but that it is the nitrogen contained in ammonia which plants assimilate, and not the ammonia itself.

The title-page of the last volume of the "Provincial Medical and Surgical Journal" should have been numbered Vol. I., 1842-43, instead of Vol. III. The volumes of the "Provincial Medical Journal" will be numbered I. and II. for each sessional year, as is the custom.

From the length of *Sir Henry Marsh's* paper, we have been compelled to postpone until next week the insertion of several communications.

ERRATUM.

Page 157, col. 1, line 20, for "five qualifications," read *first qualification.*

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
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PROVINCIAL MEDICAL JOURNAL

And Retrospect of the Medical Sciences.

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ON THE

SPONTANEOUS DISCHARGE OF CALCULI.

By John Windsor, F.L.S.,

Surgeon to the Manchester Eye Hospital.

[Read before the Manchester Medical Society, March 2, 1842.]

Dr. J. L. Bardsley, President, in the Chair.

It is well known that calculi of small size are not very unfrequently discharged spontaneously. Examples of this occur especially with regard to biliary calculi, and occasionally also as to urinary ones; more rarely still, perhaps, as to salivary calculi. The very short relation, therefore, of the following cases—the only ones I remember to have met with in the course of a tolerably long practice—I thought might not be unacceptable to the society.

I shall first mention a case of urinary calculus in a great degree, if not entirely, spontaneously evacuated; and afterwards one of salivary calculus discharged into the mouth from the submaxillary gland.

July, 1838. Eliza Bowcock, aged about 17 years, of rather small and slender make, and not yet menstruating, has occasionally suffered much from strangury or irritation of the bladder, sometimes having the pain very severely, and then again feeling nearly free from it for weeks together. The desire of passing urine returns very frequently, and is very troublesome to her in the night. She says she has no pain anywhere but in the bladder. She could not ascribe any cause likely to have induced her complaint.

On introducing a sound into the bladder, although there seemed to be some resistance, I could not be satisfied of the presence of a calculus. The urine exhibited a considerable quantity of muco-purulent looking deposit, and sometimes exhaled an ammoniacal odour. Her general health did not appear to be materially deranged. Her complaint has existed for the last two or three months at least, and during this time she has used anodyne and aperient remedies, with diluent and demulcent drinks—as linseed-tea, barley-water, &c.—but with only partial relief of her sufferings.

April, 1839. She still is affected much in the same way as at the time of the last report, although, perhaps, not quite so severely, and she looks fully as well.

September. Little change as to her complaint has taken place lately. Opiates in various forms afford her some relief. She says she cannot retain her urine at all well, and that it dribbles much from her; it still exhibits a copious, ropy, muco-purulent looking sediment, and diffuses over the apartment in which she now chiefly lies an offensive ammoniacal odour. Although about eighteen years of age she has not yet menstruated.

December 12. Continues in nearly the same state. She takes from twenty to thirty drops of "black drop" once or twice a-day, an aperient occasionally, and uses the warm bath sometimes when in great pain. A small, very sensitive, fungous growth occupies the vaginal orifice of the meatus urinarius; but she will not permit the bladder to be again explored by the sound, although the importance of this has been repeatedly urged upon her.

May 29, 1840. She has been now for some weeks in Staffordshire; her complaint, I am informed, is not better, and she has lately reported an increasing projection in the vulva or vagina.

June 1. I heard that quite lately a calculus was found presenting itself even to the sight, and that it was extracted by a surgeon. On the 17th of this month (June, 1840) I was kindly favoured with the following communication, respecting this patient, from Mr. O. Bidwell, the surgeon above alluded to, dated Albrighton, near Wolverhampton:—

"Sir,—In reply to your inquiry after Miss Bowcock, I beg to state that I have had very little to do with her in regard to treatment. I was requested to see her about three weeks ago—as a person who it was supposed had not many hours to live. She was then suffering agonizing pain, and was attenuated to a degree that I hardly ever before witnessed. The room in which she lay was hardly bearable, from the intolerable fœtor occasioned by the dribbling of the urine and ulceration of the vagina. I requested, and obtained permission, to examine the parts. The external labia were excessively swollen, and almost in a state of sphacelus. On introducing my finger, I felt a hard substance lying in the vagina, where it had probably been lodged a few days, having made its way out of the bladder by ulceration. I had no difficulty in bringing the calculus away with my fingers.

Its figure is uniform; its weight two ounces one scruple; at its largest circumference it measured four inches. For a week after the removal of the stone the parts continued in a sloughy state, but they are now well, and the girl's general health is wonderfully improved, though I fear the bladder will never regain its power; still, as the external parts are now in a better condition, some attempt must be made to restore the urethra, and to cure the fistulous opening, which I conclude must exist.

I remain, Sir,

Yours truly,

O. Bidwell.

Albrighton, Wolverhampton,
June 17, 1840."

With regard to the last part of Mr. Bidwell's letter, respecting the fistulous opening between the bladder or urethra and vagina producing incontinence of urine, I may mention that, on seeing the girl's aunt yesterday (March 1, 1842), she informed me that she had heard from her niece very lately, and that the only in-

convenience remaining from her old complaint was an inability of holding her water, but that, notwithstanding this troublesome affection, she was in other respects enjoying very fair health. In conclusion, I may add that, several years ago, Mr. John Moore, of Bolton-le-Moors, mentioned to me a case which had occurred to him, where a calculus (which he showed me) of large size and lustrous appearance, probably of the triple phosphate or fusible kind, had been gradually discharged from the bladder into (I think) the rectum, from which part he dislodged it. Of the other case I purpose relating, my notes are very brief, and I have little to add to them on the present occasion.

Calculus of the Submaxillary Gland.

September 21, 1841. Thomas Dodds, a middle-aged man, consulted me on account of a swelling of the right submaxillary gland. It had commenced, he said, about four or five years ago; was very small at first, slowly and gradually enlarging to its present size—viz., that of a large walnut or of a small hen's egg. It now projects somewhat below the jaw, and also upwards into the mouth on the right side of his tongue, thus interfering with his mastication; there is also occasionally severe pain shooting through the tumour. His general health is, however, tolerably good.

I prescribed for him the use of iodine and iodide of potassium, internally, and the latter with camphor, externally, in the form of an ointment, to be rubbed on the part affected every night.

28. The tumour presents very much the same appearance, with the same symptoms as when I saw him last.

Oct. 6. He called upon me and showed me a calculus which had passed into his mouth from the swelling under his tongue. Feeling uneasiness in his mouth, he had applied over the part a hot fig; and on examining a few hours afterwards, he found something hard projecting, which he took hold of with his fingers and drew out. From this time the pain and soreness he had so long felt in a great degree ceased, and the swelling has greatly subsided.

As the man has not called upon me again since this last report, I conclude that he found no occasion for doing so, and that the evacuation of the calculus from the part where it had formed and lodged so long, entirely relieved him of all further inconvenience.

It would appear from these cases, and I doubt not that the experience of many others might confirm the remark, that calculi, in whatever receptacles contained, may, after attaining a certain degree of magnitude, or from other circumstances, begin, like other extraneous bodies in the system, to operate as violent irritants, exciting inflammation, followed by ulceration or absorption of the contiguous textures, and thus be eliminated from the body; a natural cure, as it were, is thus accomplished. Cases of the spontaneous expulsion of calculi (especially urinary ones), like those of the spontaneous evolution of the fœtus in parturition, so well observed and described by Denman, may and do indicate to us the great powers of nature occasionally exercised in unfavourable circumstances; but long experience has demonstrated that their excretion is rarely to be expected, and that if the patient is to be timely relieved from his suffering, or rescued from approaching death itself, art and science alone can avail in accomplishing these desirable objects by the now perhaps almost perfected operations of lithotomy or lithotrity.

In conclusion, I may mention that Sir Astley Cooper used to relate in his anatomical lectures, in describing the submaxillary gland, a case of calculus of this gland, or its duct, which had occurred in the person of his celebrated preceptor, Mr. Cline. The latter had often spoke of a spasm of the mylo-hyoideus muscle with which he was affected; and at last he found it was owing to a stone in the submaxillary duct, which, by putting the finger into the mouth, could be felt to be about the size of an almond. To remove it, the cheek was drawn backwards and the tongue to one side; a cataract knife was used to expose the stone, and by a dissecting hook it was turned out of the duct.

The calculus which was discharged from the submaxillary gland of T. Dodds, is of about the bulk of a moderate sized marble, but not so completely globular in form, or even in surface; it is of a whitish colour, and weighs thirty-one grains.

The day after I had read the above short paper, I was very kindly favoured with the following communication from Mr. Moore, of Bolton, respecting the case above alluded to, accompanied by a cast of the calculus, which he extracted; and his description of the case here subjoined will, I believe, be considered a very interesting one:—

"My dear Sir,—I cannot find the notes of the case on which you request some information, but I will give you the history of it so far as my memory enables me at this distant period. The patient's name was Hart (aged 62), and he had had symptoms of stone in the bladder upwards of forty years without consulting any medical practitioner. I visited him in the spring of 1816 for the first time, and found that he passed nearly the whole of his urine by the anus.

On examination with the finger, I found an ulceration through the bladder and rectum, and a calculus, which I imagined to be about the size of an egg, partially protruding into the rectum. I promised him a quiet, easy, and successful operation, and returned the next day with two medical friends. I first dilated the wound with a bistoury, so as to enable me to introduce the forceps, and expected to remove it with great facility, but I was obliged repeatedly to enlarge the opening, and still without success. I then made a continuous incision through the sphincter ani to the opening, and renewed my efforts to extract the calculus, but I was still baffled. I then attempted to break it with the forceps, for I had no other instrument to do it with, being four miles from Bolton. I succeeded in removing about two or three ounces of fragments of the stone, and then made a last attempt to disentangle it from its birth, by laying hold of it with the forceps and pushing it backward, giving it a twist or turn at the same time; this enabled me to bring the culprit to light, with the assistance of a friend who pushed back the os coccygis. The weight of the calculus was fifteen ounces, independent of the fragments; and its extreme size and peculiar shape were, in a great measure, the cause of the difficulties I had to encounter. Originally there had been two stones,

which were intimately amalgamated into one, being in shape something like the body of a goose with a short neck and head; and I suppose the head rested or caught hold of some part of the os ischium when I made an attempt to extract it, and rendered my efforts ineffectual for so long a time, for I was nearly an hour and a half before I had finished the operation. About six weeks afterwards, the patient was able to walk into his fields and superintend his farm; but the urine only partially passed by its natural course, though the wound was very much contracted. At this period I left home for upwards of a month, and when I returned, I found he had died without being visited by any medical man. I beg your acceptance of a cast of the calculus, and shall be glad at any future time to give you further information if you think it requisite.

I remain, my dear Sir,
Yours, most truly,
John Moore.

Hillcot, March 3, 1842."

CASE
OF
FEVER CAUSED BY MENTAL ANXIETY.
WITH
PROFUSE HÆMORRHAGE FROM THE BOWELS.

By William England, M.D., Wisbech.

[*For the Provincial Medical Journal.*]

Mr. S——, a gentleman farmer, aged 50, of plethoric constitution, temperate habits, of much warmth of feeling, and susceptibility of emotions which were strong but well regulated, was subject for some weeks to great mental anxiety, owing to the increased extent and responsibility of business. In a recent instance, being a witness to some peculiar circumstances connected with the indisposition of one of his neighbours, he evinced strong feelings of emotion, and being obliged to journey to London was overworked mentally and bodily.

April 23, 1842. His medical attendant, Mr. Weatherhead, first saw him, and prescribed blue pill and a purgative draught, with saline diaphoretic mixture.

25. Febrile symptoms not abated. The remedies were repeated.

28. Mr. S. called on Dr. England, said he had been unwell three weeks, and had experienced a rigor at the railway station. Countenance expressive of great mental anxiety; fixed stare and prominence of the eyeballs, as if the nervous system had received a severe shock; not the least pain of head; forehead not hot; no increased action of the temporal artery; skin warm, rather dry; pupils very slightly contracted, but no greater intolerance of light than usual since he had had been the subject of ophthalmic inflammation last year; pulse 90, remarkably soft and feeble for a man of his physical muscular development; tongue slightly tremulous, covered with a thin, white, moist coat; abdomen free from pain on pressure; flatulence; anorexia; thirst; little or no sleep for the last week.

The patient was advised to allow his medical attendant to see him daily, to suspend all attention to business, and go to bed. His bowels having been evacuated by mercurial and saline cathartics, he was ordered

Calomel, one grain;
Extract of hyosciamus, three grains;
Soap, five grains. Two pills to be taken every night.

Sulphate of magnesia, two drachms;
Carbonate of magnesia, one scruple;
Rhubarb, five grains;
Tincture of jalap, one drachm;
Manna, one drachm;
Compound infusion of senna, one ounce and a half.
A draught, to be taken early in the morning, and again at mid-day, if required.

Solution of acetate of ammonia, two ounces;
Carbonate of potass, one drachm and a half;
Nitrate of potass, two scruples;
Spirit of nitrous æther, half an ounce;
Tincture of hyosciamus, one drachm and a half;
Camphor mixture, two ounces and a half;
Peppermint water, two ounces. Two tablespoonfuls to be taken every five hours.

30. Mr. S. came to Dr. E. again; thought himself better; bowels had been well relieved; had had some sleep; thirst diminished; other symptoms much the same. With great difficulty he was persuaded to permit Dr. England and Mr. Weatherhead to see him regularly, and was directed to remain at home on the following morning.

May 1, Half-past Nine, a.m. The patient has just risen, and is sitting on his sofa. Eighth day, at least, of fever; pulse soft, very feeble; no more intolerance of light than usual, nor the least pain of head; temperature of scalp rather increased; tongue white, moist, thinly coated; skin hot. Sixteen leeches to the temples; cold lotion to the head; a grain of calomel night and morning. Continue saline mixture.

2, Ten, a.m. In bed; says he is much better; no cephalalgia; quite conscious, and coherent; same expression of mental anxiety in the countenance; pulse 94, soft; muscles of upper extremities tremulous, not amounting to subsultus; tongue tremulous, white, moist.

3. Much better.

4. Fever diminishing.

5. Having complained of slight cephalalgia, twelve leeches were applied.

8. Pulse 120; tongue tremulous, soft, moist, white, not easily protruded; other symptoms more favourable; bowels moved twice a-day with castor oil. Alvine evacuations becoming natural; urine less high-coloured; flatulence; no pain of abdomen on pressure. Omit the morning dose of calomel. Continue remedies.

9, Ten, a.m. Pulse 86; is altogether better.

1—2, p.m. Profuse hæmorrhage from the bowels suddenly came on, unpreceded by any abdominal pain. Chalk mixture, with ten drops of opium, one drachm of tincture of cinnamon, and twenty drops of compound spirit of ammonia, every four hours.

Nine, p.m. Distension of abdomen and flatulence relieved; some tenderness of abdomen on pressure. Apply twelve leeches to the abdomen. Bowels not moved since the hæmorrhage. To have an enema, with decoction of barley and spirit of turpentine, two drachms. A fæculent evacuation without farther hæmorrhage.

10. No return of hæmorrhage; tongue easily protruded, moist, almost clean; no longer tremulous;

pulse 94, soft; skin warm, perspirable; slight abdominal pain returning. Apply twelve leeches to the abdomen.

11. Skin cool; copious perspiration; pulse 90, compressible; thirst diminished; bowels not moved. To have three grains of mercury and chalk at night, and half an ounce of castor oil in the morning; also to take the following draught, when the skin is cool, until the evening exacerbation:—

Infusion of cinchona, camphor mixture, of each five drachms;
Spirit of nitrous æther, half a drachm;
Compound spirit of ammonia, twenty drops;
Tincture of hyosciamus, twenty drops. A draught every four hours.

Mr. S. continued to improve, his bowels only requiring small doses of castor oil from time to time till the

19th, when the symptoms were—*Head*, perfect consciousness, no pain or delirium, no intolerance of light. *Tongue*, for the first time, dry, and of a reddish brown, thinly furred, not tremulous, well protruded. *Respiration*, murmur normal, respiratory acts rather slower than natural. *Heart*, systole or first sound feeble, very indistinct, pulse 92. *Voice*, whispering. *Abdomen*, no tension, but little flatulence, no pain on pressure, alvine evacuation bilious. Omit the bark draught.

Carbonate of ammonia, four grains;
Carbonate of soda, five grains;
Spirit of nitrous æther, half a drachm;
Compound spirit of lavender, half a drachm;
Camphor mixture, one ounce and a half. A draught every four hours.

To have one ounce of sherry, with arrow-root, every six hours; arrow-root, with a small quantity of animal jelly in the intervals.

20. Marked improvement; heart's action stronger; pulse 90, firmer; thirst almost gone; relishes his wine, arrow-root, and jelly; complains of no pain, but of great prostration of strength; tongue moist, cleaning; bowels not moved; anxiety of countenance gone.

21, Eleven, a.m. Enema, with decoction of barley, and half an ounce of castor oil, secured a healthy feculent evacuation, somewhat formed. *Vespere*, three or four bilious evacuations, without pain or tenesmus; conscious of tendency to diarrhœa; eye foreboding delirium.

22, Half-past nine, a.m. General symptoms apparently better; pulse 92, firm as before; voice stronger; expresses himself conscious of gaining strength. *Vespere*, hæmorrhage returned, but not to the same extent as the first, accompanied with fæcal matter. Omit the wine. To have an astringent draught at once. Superacetate of lead, two grains; opium, a quarter of a grain every four hours.

23. Extreme prostration of strength; pulse 120, mall; tongue dry, of a whitish brown colour; quite conscious; thinks himself not worse. To have the cordial draught without opium. Nine, p.m., in consultation with the senior physician in the neighbourhood, the following medicine was ordered:—Calomel, twenty grains at once; camphor draught, with twenty drops of the sedative solution of opium. Ten grains of calomel to be taken at six o'clock in the morning. A draught, with nitric acid, three drops; muriatic acid, five drops; syrup of oranges, one drachm; water, one ounce and a half. Every four hours. Lemonade, with sherry, arrow-root, and jelly.

The powder and draught taken about ten, p.m.; half-past twelve, a.m., visited by Mr. Weatherhead; pulse at wrist not perceptible; great restlessness; convulsive movements of the upper extremities; respiration very slow; frequent sighing; now for the first time thinks himself worse; hot water to the feet; a tablespoonful of sherry in toast and water repeated in half an hour; took a small quantity of coffee; an effort to discharge the flatus led to vomiting; unconsciousness succeeded for five minutes, when he expressed himself relieved; an hour afterwards, after taking a small quantity of arrow-root, tendency to vomiting returned; a large quantity of flatus was discharged; he sunk down in an unconscious state, and died in five minutes.

REMARKS.

In the present case our attention is called to the mental origin of the fever, anxiety and emotional feeling acting as a predisposing, if not an exciting, cause; the lapse of a week or more before regular treatment could be adopted; and the hæmorrhage which, in the first instance, seemed critical, but, on its recurrence, further prostrated the vital powers. The note-book of every practitioner proved, prior to the numerical method of M. Louis, that in the statistics of fever, the chance of assisting nature is in a direct ratio to the removal of the congestive and inflammatory complications during the first week or ten days of treatment, as, with the art of the accoucheur, the management of the first stage is, on an average, almost everything; after that period the *nimia medici diligentia*, and an empirical faith in remedies, will only lessen the chances of recovery. In the case of Mr. S., the prognosis from the first was unfavourable; there was no little probability of typhus gravior being the effect of the primary lesion of the nervous system, and, considering the consequences of the mental shock, and the period of ten days having elapsed before regular treatment commenced, it is hardly probable that more active depletion could have been safely trusted to. Petechiæ did not appear during the whole progress of the case. On the ninth day of treatment (about the sixteenth of fever) came on profuse hæmorrhage from the bowels, and a remittent type was clearly developed. The perspirable state of the skin amounted sometimes to copious sweating, though, through this channel, no salutary or satisfactory resolution of the diseased action seemed to be effected. The hæmorrhage had the appearance of being critical or salutary, and, under the use of remedies for remittent fever, improvement continued for ten days, till the 19th (twenty-sixth day), when, for the first time, the tongue became dry, and of a reddish brown typhoid character. Wine given with caution, according to the valuable indications pointed out by Dr. Stokes, produced the most marked benefit in the next twenty-four hours. The instinctive desire for wine and aliment was a generally unerring evidence of approaching safety and convalescence; the voice, before feeble and whispering, became stronger, almost natural; the improvement of the tongue and pulse was

also manifest, though the latter, scarcely coming down below 90, was always a cause for suspicion. On the evening of the 21st (twenty-eighth day), tendency to diarrhœa showed itself, which was controlled by a cretaceous aromatic draught, with an opiate. 22nd (twenty-ninth day), progressive convalescence still apparent; in the evening, return of hæmorrhage, though not to the same extent as the first thirteen days previously. 23rd (thirtieth day), pulse 120; action without power. Death, half-past one, a.m., on the 24th.

Since the admirable natural drainage of the immediate neighbourhood of Wisbech, the remittent fevers, attended with profuse hæmorrhage, delineated by Dr. Robert Hamilton in his "Observations on Marsh Remittent Fever at Lynn and its Environs" (pp. 49, 50), when blood oozed out with all the secretions and excretions, have chiefly continued a subject of medical literature. The gentleman who shared the responsibility of the treatment from the commencement, an experienced and very judicious practitioner, had not seen a case of remittent fever strictly parallel during a residence in Wisbech of forty years. Twenty years ago I had the charge of numerous cases of fever at the edge of the low country in the very neighbourhood where Dr. Hamilton's epidemic was most rife (1783), but no hæmorrhagic complication of the same gravity came under my notice. The dysenteric complication, almost endemic among the half starved poor of the Liberties of Dublin, the Cowgate of Edinburgh, and other unhealthy localities, cannot be admitted into the same category. Not having made much research into the literary records of this complication of fever, the only notice to be found in the long series of the "Edinburgh Medical and Surgical Journal" at all approaching to analogy is in a lucid paper by Mr. Edmonson, on the fever of Newcastle in 1818. This gentleman says, "Several cases occurred of profuse discharges of blood *per anum*. In a very few this symptom appeared to be critical and salutary; in the others it was the immediate precursor of death."

An opinion has been given that the hæmorrhagic complication in the case of Mr. S. may be the forerunner of an epidemic; but so totally altered is the physical condition of our *quondam* fen district since the time of Dr. Hamilton, that a rational hope may be entertained of our not being again visited by such a plague in an epidemic form, should sporadic cases make their appearance from time to time, and baffle our efforts. That no post-mortem examination took place, is much to be regretted.

DISLOCATION
OF THE
TIBIA BACKWARDS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—In the number of your Journal for May 14, appears a brief report of the papers read before the Royal Medical and Chirurgical Society, at the meeting on the 26th of April. The first paper noticed in your report is a highly interesting one, on a case of dislocation of the tibia forward, at the knee-joint. The object of the paper, it seems, was to show, that although laceration of the ligaments and other tissues must necessarily take place, still this occurs frequently not to such an amount as to render the restoration of the joint to a perfectly useful state so problematical a chance as is represented by some authors of the first eminence. The publication of the above case has called to my recollection an accident which occurred in my own practice several years since, and although not resembling Mr. Coote's case in form, yet its consequences and result were so similar (evincing moderate laceration and perfect recovery), that I am induced, even at this remote period from its occurrence, to offer it for insertion in your pages. On the 17th of December, 1829, I was hastily summoned to an accident which had occurred at the principal inn of this town, situated within fifty yards of my own door: a stage coach had been just driven up to change horses, and, as is usual, a ladder placed beside and against it; the woman who collected and delivered the parcels had ascended the ladder, and was standing upon it, when a man in a state of intoxication drove furiously against the ladder, upsetting it and throwing the woman violently to the ground; she was immediately taken up, and carried into the kitchen of the inn; I was quickly by her side, and on examining the injured limb, found the tibia completely dislocated at the knee, the head of that bone having been driven behind the condyles of the femur into the ham, with the patella thrown to the outside of the external condyle of the femur, and the leg in a state of fixed extension.

I immediately, and without difficulty, restored the parts to their normal situation, by applying one hand to the patella, the other to the back part of the upper portion of the tibia, and simultaneously pulling and pushing those bones into their natural positions. The patient was then removed to her home, a distance of about two hundred yards from the inn, and placed in bed. By the employment of leeches, evaporating lotions, and strict rest, inflammation was kept in check; in short, no untoward symptoms whatever arose, and after the lapse of a few weeks she perfectly recovered the use of the joint. It appears from the second edition of Mr. Samuel Cooper's "Surgical Dictionary," that as late as the year 1813, the occurrence of a *complete* dislocation of the knee backward was denied; but in after editions (I speak from the sixth) he refers to cases in which this rare species of dislocation had occurred, and more particularly on the authority of the late Sir Astley Cooper. In the sixth edition of the Dictionary, published 1830, Mr. Cooper writes, "That this accident, however, sometimes really happens, no longer admits of dispute; the case is noticed by Sir A. Cooper as producing the following appearances: a shortened state of the limb; a projection of the condyles of the os femoris; a depression in the situation of the ligament of the patella; and a bending of the leg forwards: which last statement differs from that of Boyer, who declares that the leg is bent to a very acute angle, and cannot be extended again." It is seen above that, in the case which occurred to me, the position of the leg, that of "fixed extension," confirms Sir Astley's statement; and, as far as my recollection serves me, I should

say, that Sir Astley's expression, "a bending of the leg forwards," gives a better idea than mine of the relative position of the leg to the thigh. Mr. Cooper also says, "It appears further from the particulars of the example of the accident seen by Dr. Walshman, that the dislocation may even be complete, the head of the tibia being thrown behind the condyles of the femur into the ham. The tendinous connexion of the patella to the rectus muscle was ruptured; and probably without a laceration of that tendon, or of the ligament of the patella, such a degree of displacement could scarcely have happened." In my case, neither the tendon nor the ligament was ruptured; but the patella was thrown to the side of the external condyle of the femur; which circumstance, no doubt, saved those parts from laceration.

Reference having been made in Mr. Cooper's Dictionary to a case of dislocation backward, recited by Heister, I had the curiosity to refer to that author; from whose volume I learn, that he does not dispute the actual happening of such an accident, but he gives no case in illustration of its characteristics and treatment. I find that Richard Wiseman, serjeant-chirurgeon to Charles II., who published his work on Surgery in 1676, gives a case of luxation of the knee backward, which merits notice even at this period of improved surgery: with your permission, I will transcribe it here. "A gentleman of about thirty years of age, riding upon the road some few miles out of town, was by the rushing of a cart tumbled with his horse into a ditch, and brought back to *London* extremely lame and bruised. I being fetched to him, found him in bed. The head of the *os tibiæ* was shot under the thigh-bone, and lay stretcht out straight, exceedingly swelled, and much bloud extravasated amongst the muscles of the calf of his leg. I caused the patient to be laid on the contrary side; then one of the company held him down, and kept that thigh steady, whilst I took him by the foot and calf of his leg; and after I had a little drawn it to me, I forced it backward towards his buttock; by which very motion it knapt into its place. That done, I extended it again, placing the while my hand in the hollow of his knee. The motion of that joint to and fro, and the filling up that cavity under the *rotula*, were certain signs of its reduction." (page 496). Then follows his description of the after treatment; embrocating the leg, "*cum albumine ov., ol. ros. myrtill. & aceto,*" applying *empl. è bolo* over all, with a compresse in his ham." Afterwards embrocated "*cum ol. cham. lumbric., spir. vini*, and applied *empl. stict. Paracels. & diapalmæ* on the weak joint." He finishes his case with saying, "and sometime afterwards I saw him walking abroad with a stick in his hand." In this case also is Sir A. Cooper's statement, with regard to the position of the leg, supported, and further confirmed by the mode adopted for the reduction of the displaced bones.

Your obedient servant,

C. B. Rose,

Fellow of the Royal Medical and Chirurgical Society of London.

Swaffham, May 24, 1842.

CASE OF IMPERFORATE VAGINA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,— Should the following case of imperforate vagina be deemed worthy of occupying a place in your Journal, I should feel obliged by its insertion.

Yours respectfully,

J. T. Jameson,

Surgeon to the Rochdale Dispensary.

May 30, 1842.

On the evening of July 23rd, 1840, I was requested to visit Alice Ashworth, aged 16, a moderately stout and well formed girl, on account of a severe pain in the abdomen, with which she had been suddenly attacked while at work in the factory. The pain was evidently of a spasmodic character, and arising, as I then supposed, from the constipated state of the bowels. She also complained of some little difficulty and pain in micturition. A brisk purgative was ordered, and on the following day, the bowels having been freely acted upon, I found the patient so much better, that I did not consider it necessary to see her again.

Nothing more was heard of her until the 24th of October, 1841, when I was again desired to visit her. I found her in a state of profuse perspiration from severe abdominal pain, coming on in paroxysms, and occupying principally the lower part of the abdomen, the sacral region, and extending from thence along the back of the thighs. Bowels as usual, in a constipated state; considerable difficulty and pain in emptying the bladder; complains of a severe pain in the left hip, which causes her to limp in walking; has never menstruated; for the last four years has had a bronchocele, which has increased rapidly in size within the last three weeks; the mammæ are moderately developed. Her mother informs me that, since I last saw her, she has scarcely passed a day without experiencing more or less pain in the belly, aggravated greatly at intervals of about three weeks. Various remedies have been administered, more especially gin and pennyroyal tea, with the view of causing the appearance of the menses. On examining the abdomen, a firm and well defined swelling was readily perceived, extending upwards nearly as high as the umbilicus, being evidently produced by the distended uterus. It was somewhat painful on pressure; the external organs of generation were found, on examination, to be in their normal condition; in the site which the opening of the vagina naturally occupies there existed a small aperture which, with considerable difficulty, allowed of the introduction of the little finger to the extent of half an inch; any further entrance was opposed by a firm unyielding substance, through which, when pressure was made upon the uterine tumour, a very obscure sense of fluctuation was perceived. On examination per anum, a large tumour, having a distinct feeling of fluctuation, was found to occupy the pelvic cavity, and by the pressure it occasioned upon the rectum, sufficiently accounted for the obstinate constipation that existed. With the assistance of my friend and partner Mr. Coates, a small trocar and canula were passed up to the firm unyielding substance, at the upper part of the small cul de sac above described,

and then pushed steadily upwards, pressure being at the same time made upon the abdomen. As soon as the trocar was withdrawn, there flowed through the canula a large quantity (upwards of two pounds) of a dark brown fluid of the consistence of treacle. Guided by a grooved director, which was now substituted for the canula, two lateral incisions were made with a small scalpel, by which the aperture was sufficiently enlarged to admit the fore finger, aided by which the aperture was still further enlarged by an incision directed posteriorly. The sensation imparted in the making of these incisions was somewhat similar to that caused by the cutting of cartilage. The finger could now be readily passed through the artificial opening, which had a rigid, unyielding feel, into a large cavity, beyond which nothing definite could be detected. On the following day, I found that she had made water very well, and that there had been a copious discharge of fluid of the character above mentioned; abdomen soft and free from pain; has not felt so easy for months past. It would only be wearying the patience of your readers to enter upon the subsequent daily details of the case, in which nothing remarkable occurred. I experienced much trouble for some time, in preventing the aperture from closing, notwithstanding the daily use of bougies. I saw her mother a few days ago, when she informed me that her daughter was very hearty, and had twice menstruated during the last two months, and that she still occasionally introduced the bougie. I may state that the bronchocele dimished rapidly in size after the operation.

VACCINATION DEFENDED AGAINST THE ATTACKS OF MR. BROWN.

Letter V.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Mr. Brown's fourth letter is devoted to the consideration of the extent to which the vaccine has failed to give security against small-pox. This letter is remarkable for its boldness of assertion, and for its absence of facts on which to ground conclusions. Mr. Brown asserts, that one half of the vaccinated afterwards contract small-pox; and, as we believe him to be an honourable man, and incapable of voluntarily sophisticating results, we can only account for this great number of failures on the principle formerly mentioned—that is, his inattention to those circumstances which, however apparently trivial, are, in our view, essential to the perfection of vaccination. It is only thus that we can account for the immense difference of result in Mr. Brown's experience and our own—his being that of one half and ours not quite the two hundred and fiftieth part.

It is remarkable that Mr. Brown should have alleged as evidence against vaccination, the fact of the Academy of Sciences at Paris having offered a prize for the best essay on the subject. Surely this is giving no opinion on vaccination, but only showing that they think the science and the practice of vaccination imperfect, and that they wish to excite such attention and investigation of its details as shall carry it on to its highest state of perfection.

We shall pass over Mr. Brown's correspondence with the N. V. E., as not being important to the matter in hand, only repudiating on behalf of the profession his assertion at page 80, that "the whole of the most experienced and respectable members of the profession are very far from entertaining such a decided opinion of the merits of vaccination as were entertained by Jenner, or now by the board of the establishment."

Now, we are left to infer from this sentence, that the opinions of the board of the present N. V. Establishment, are those unchanged, unmodified, which were first promulgated by Jenner; and that the majority of the best-informed practitioners dissent from such opinion. It is always unfortunate when, in argument, things which differ essentially are classed as though they perfectly agreed; because, although by this means a case may be made out against an antagonist, truth is sacrificed. Now here, it is quite true that Jenner believed in the perfection of his discovery, and thought that it offered a perfect immunity from all future attacks of small-pox; experience has shown the contrary; consequently, from this opinion the wise and prudent dissent, and for many years they have rested the claims of vaccination to public confidence, not on its affording absolute protection from the attack of variola, but from its affording "the best protection against the malignant small-pox." These are the words of the National Vaccine Board, quoted from Mr. Brown; and from this opinion the "most experienced and respectable members" of our profession do not dissent; on the contrary, they believe that it does afford the best possible security from the consequences of variola—even greater than is afforded by inoculation itself.

Mr. Brown next gives an *opinion* of Mr. Otto, that the protective influence of the vaccine "diminishes with time, and that small-pox after vaccination is always more mild the younger the person so attacked is, and that regular variola in the vaccinated appeared only in persons who had passed the age of fourteen." With regard to this opinion, it is all comprehended under the simple law which renders all eruptive diseases more violent in the adult—that is, more violent in proportion as they have advanced from that period of infancy in which vaccination is generally performed; consequently, under this general pathological law, we should expect the attack of modified variola to be more severe in adult life, not because the influence of vaccination had been exhausted, but simply because the patient was older, and therefore the attack was more severe; precisely in the same way as an attack of measles, scarlatina, &c. It is unphilosophical to account for any phenomenon by a law made to suit a favourite hypothesis, when it can be accounted for equally by an established law of morbid action.

But having quoted this opinion, Mr. Brown infers from it that it is proved (how can an opinion, *a fortiori* a controverted opinion, afford proof?) "that the number may not only be indefinitely increased, but the severity and danger of the consequent attack of small-pox also; in proof of this last very important fact, seven out of ten vaccinated persons died of small-pox before they had passed the age of twenty-three years." We are bound to believe the fact stated as to the number of deaths from small-pox, but we do

most conscientiously believe that they had never re-received the protection of vaccination; and that, however they may have had sore arms in consequence of vaccination, there has been some grievous defect in the process, perhaps vaccinated by Mr. Brown with lymph taken after the formation of the areola!

To Mr. Brown's assertion, however, we must again refer to our own experience, diffused over more than 30 years, during which there have been 20 failures in more than 5,000 vaccinations, and not one death; and in which 15 or 16 adults (my own pupils and assistants), from the age of 16 to 30, have exposed themselves in every possible way, and repeatedly to the contagion of variola, and have remained scatheless. Can Mr. Brown produce a parallel number of instances in the unprotected on the one hand—in 20 cases of natural small-pox without preparation for the malady—or in a similar number of cases of secondary small-pox? But if not, with whom lies the security from the malignant influence of this fearful malady?

As the remaining observations in this letter will more properly come to be noticed by and bye, we pass on to Mr. Brown's fifth letter, in which he first notices some fanciful notions of Dr. Jenner which have not borne the test of time, and reasons upon them, as if they were now believed; and thence infers the insecurity of the ground on which vaccination rests—viz., not on its own nature and phenomena, but in the errors of those who have speculated upon them.

We agree with Mr. Brown, however, in one point, and really it is delightful to find one common resting-place—that is, that the vaccine lymph does not deteriorate by successive vaccinations, but that, like all other specific maladies, it remains the same; and that now, as well as in the earliest perfect vaccinations, making allowance for constitutional temperament, &c., *mutatis mutandis*—as in small-pox, so in the vaccine, inoculation will always be followed by a characteristic areola, attended by constitutional febrile movements, and by permanent security from the malignant influence of small-pox, and in this sense it is true that there are no grounds of comparison between the two inoculations, "because the same satisfactory results were produced," only that in the case of vaccination the patient was safer than in the case of small-pox inoculation. But this is what Mr. Brown did not intend.

Mr. Brown's next objection to vaccination consists in the fact that chemical analysis, and the reports of the senses, do not enable us to invest vaccine lymph with qualities by which we may judge of its purity and efficiency, or determine that it is spurious and inefficient. It has no distinct or sensible aroma; it is tasteless; it conveys no impression to the sense of touch beyond a smoothness of feeling, something resembling a mixture of oil and water. Chemical tests throw no light upon the anti-variolous property of the vaccine—nay, show it to be destitute (that is, do not detect) of any principle of active or peculiar influence, for "the vaccine is not friable, readily evaporates, and leaves no residium when subjected to heat," &c.

Now, Gentlemen, we might, perhaps, be permitted to ask, of what avail is all this argumentation, and how does it bear upon the question, which, after all, is settled by the forgotten sense of sight, the sense which informs a properly instructed practitioner what is a genuine vaccine vesicle, and that the varioloid malady which does occasionally happen afterwards is modified small-pox—small-pox deprived of its malignity?

And we must be permitted to deplore the position in which we are now, for the first time, placed by the enlightened philosophy of the nineteenth century; for, by parity of reasoning, whatever attention may be paid to pure limpid gastric fluid, it possesses no distinct smell or taste, and, when rubbed between the fingers, it only gives a smoothness of feeling—*ergo*, it is quite impossible that it can possess any peculiar properties by which the function of digestion is to be carried on. Again, we lament the total failure hereafter of all the functions of mental manifestation, and of organic life, which are dependant upon nervous influence; for chemical analysis has failed to throw any light upon the nature of nervous influence, or to detect its presence, or to produce a residium by heat; it does not corrode the finest lancet, shows no acidity, possesses no sensible properties, and, therefore, cannot perform the functions assigned it. To such absurd conclusions are we led by following Mr. Brown's reasonings in support of a favourite hypotheses.

We ought to have noticed one crime alleged against medical persons, that they advise their vaccinated patients not needlessly to expose themselves to the contagion of small-pox. And why? Simply because they (being well informed) are aware that the protection afforded by vaccination is not absolute and entire in all cases; and also being aware that they have no means, *a priori*, of ascertaining which among their patients will prove the exception to the general rule of security, they advise all to avoid needless exposure to a contagion which, if received, will produce a troublesome, though not generally alarming, malady—a malady which, however, is capable of diffusing itself among the unprotected, and, with them, of producing a highly dangerous disease. And is not this both philosophical and benevolent?

Mr. Brown next objects against vaccination, that the points transmitted by the national board have often failed of producing a satisfactory result. Granting that such was the case, we might be led to impugn the conduct of the board; but how does this in any way operate against vaccination itself? Our belief is, that in the great majority of instances of failure, the fault has resided with the vaccinator. For many years I used to make small punctures and insert the points, so as to leave the lymph upon the true skin, and I often failed of producing the result desired. I altered my plan; I scratched away the cuticle, till I had exposed the true skin. I then rubbed the charged point upon the abraded surface, and the result has been almost invariably successful. The early failures consisted here in the error of the vaccinator.

Mr. Brown next draws a conclusion that "there may be several kinds of vaccine virus, and of course of different qualities, because Mr. Ceely is of opinion that 'the real vaccine virus does not degenerate from use.'" As if in everything there is not a distinction to be drawn between that which is genuine and that which is spurious—and as if this were anything more than arguing in a circle—for the real vaccine virus

does not degenerate; but the assumption that there is such a thing as real vaccine virus proves that there may be that which is unreal; and, therefore, there must be several kinds and different qualities of vaccine virus.

In the remaining part of Mr. Brown's fifth letter there does not seem to be anything requiring animadversion, as it is principally occupied in upholding a position in which we both agree, though for a very different purpose—viz., that the efficiency of the vaccine has not degenerated. I have said we both agree in this position, but with widely different views. Mr. Brown believes it for the purpose of proving this syllogism:—

The vaccine has not degenerated.

It does not afford permanent security against small-pox.

Therefore, it has been imperfect from the beginning.

I, on the contrary, accept Mr. Brown's testimony for the purpose of upholding a very opposite conclusion, which might be thus stated:—

Vaccination has afforded the best possible security against the malignity of small-pox.

The efficiency of the vaccine has not degenerated.

Therefore, vaccination continues to afford the best possible security against the malignity of small-pox.

In my next communication I shall pass to the consideration of Mr. Brown's fifth letter; and, in the mean time, I am,

Faithfully yours,

W. NEWNHAM.

Farnham, May 24, 1842.

STATISTICS OF AMPUTATIONS

PERFORMED IN

THE PARISIAN HOSPITALS.

By M. MALGAIGNE.

(Concluded from page 149.)

CAUSES WHICH INFLUENCE THE MORTALITY AFTER AMPUTATIONS.

The first question which M. Malgaigne endeavours to solve, is the influence exercised by the cause which gave rise to the necessity of operation. Amputations performed after injuries are more dangerous than those performed in consequence of disease.

Thus, in a total of 789 amputations, we have 524 after disease, 193 deaths, or 38 per cent.; 265 after injuries, 130 deaths, or 49 per cent. This difference is more striking if we separate the capital operations from the minor ones. The mortality then is for capital operations, after disease, 48 per cent; after injuries, 64 per cent. For minor operations, after disease, 7½ per cent.; after injuries, 15 per cent. Here, then, the influence of a traumatic cause seems more powerful with respect to the minor than the capital operations.

The question, then, appears to be clearly settled, but it leads to a much more important one—viz., that of primary or secondary amputations after injuries. The statistics on which M. Malgaigne computes the relative mortality of amputation, under these two conditions, are 26 amputations of the thigh, and 43 of the leg.

Of the 26, 16 were immediate and 10 secondary; in the former case, there were 12 deaths; in the latter, 6. Of the 43 amputations of the leg, 33 were immediate, giving a mortality of 22; 10 were secondary, with a mortality of 7. If we add all the cases together we have 49 immediate, with 34 deaths; 20 secondary, with 13 deaths. The only conclusion, however, which M. Malgaigne draws, is, that the question requires further examination. Of the causes which render amputation of the thigh necessary, compound fracture from gun-shot wound is one of the most frequent. Most surgical writers advise immediate amputation, but M. Malgaigne is of a different opinion. In 1814, M. Marjolin performed 14 amputations of the thigh for gun-shot wounds, and saved only *one* patient. Again M. Ribes examined the 4,000 invalids collected together at the Hotel des Invalides, without finding a single one who had had fracture of the femur with wound of the surrounding soft parts; nor was there a single patient whose limb had been amputated for fracture of the middle of the thigh. Hence, all the soldiers sufferings under this accident had either died on the field of battle or after operation.

Influence of Age.

Having shown the influence of sex to be in favour of the female, and particularly that the minor amputations are almost without danger in the female when compared to the male, M. Malgaigne examines the influence of age. Before entering on the subject he refers to lithotomy, which may be compared, in some respect, to amputation for disease. During the six years, 1836 to 1842, the number of operations for stone performed in the hospitals of Paris, with their results, was,

Ages	2 to 5	5—15	15—20	20—35	35—50	50—65	65—80
Operations*	6 3	28 4	13 4	10 4	3 1	6 5	9 7

Hence, in 75 operations for stone we have 28 deaths; more than a third—a proportion far different from that announced during the discussions on lithotomy and lithotrity.

The influence of age on amputations is shown in the following tables:—

CAPITAL AMPUTATIONS AFTER DISEASE.

Ages	2—5	5—15	15—20	20—35	35—50	50—65	65—80
Thigh	....	13 4	24 12	50 32	19 16	8 8	1 ..
Leg.....	2 1	9 ..	11 6	24 12	19 7	13 9	2 2
Foot	....	3 ..	4 ..	7 ..	3 ..	3 1	1 1
Shoulder ..	....	....	1 ..	....	2 2	1 1	....
Arm	....	6 3	5 1	21 9	8 3	4 2	3 1
Fore-arm ..	....	1 1	....	3 1	4 1	4 2	1 ..
Total: Males	2 1	32 8	45 19	105 54	55 29	33 23	8 4
Females ..	2 1	25 7	21 9	23 9	17 11	7 6	3 1
Both sexes	4 2	57 15	66 28	128 63	72 40	40 29	11 5

* The number of operations (in this and the other tables) is represented by the number to the left of the column: that of deaths, by the number to the right.

MINOR AMPUTATIONS AFTER DISEASE.

Ages	2—5	5—15	15—20	20—35	35—50	50—65	65—80
Males	....	7 ..	23 1	42 3	23 5	10 ..	1 ..
Females	....	9 ..	4 ..	7 ..	10 ..	7 1	3 1
Total	....	16 ..	27 1	49 3	33 5	17 1	4 1

Thus, from the above tables, it appears that in young children, the mortality amounts to one half of those operated on; the next period is the most favourable one; we have then a period of decline, until we come to the most unfavourable one, that comprised between the ages of 50 and 65. Between 65 and 80, however, we have a period more favourable than the two preceding ones.

If we examine amputations performed after injuries (traumatic) we find, from the tables of M. Malgaigne, that the mortality is excessively great amongst children. Thus, of 25 capital and minor amputations after injuries, performed on children up to 15 years of age, no less than 16 proved fatal; the mortality diminishes from 15 to 20; then from 20 to 35, and the most favourable period is from 35 to 50. The following table shows that the mortality of hernia, follows the same rule:—

MORTALITY IN OPERATIONS FOR HERNIA.

Ages	2—15	15—20	20—35	35—50	50—65	65—80
Males	2 2	2 2	29 16	26 10	22 18	19 14
Females	....	1 ..	7 4	37 17	38 28	37 22
Total	2 2	3 2	36 20	63 27	60 46	56—36

Influence of Season.

The season is supposed by many surgeons of high authority, to exert some influence on the success of operations. Dupuytren preferred the spring, and after it, autumn. M. Velpeau is of the same opinion. Statistics, however, are quite at variance with the generally received ideas on this point. Without following M. Malgaigne through the numerous tables which he gives, we may mention that he shows clearly that the mortality is least in winter for adults, but greatest for young subjects. This, however, only applies to operations performed for disease. The mortality of amputations after injuries does not seem to be influenced in the slightest degree by the season of the year during which they are performed.

Comparative Influence of Hospitals on the Mortality after Amputations.

Under this head M. Malgaigne investigates a highly curious question, but as it cannot interest us much, we shall only mention a few points which he has established. His statistical researches embraced nine of the principal Parisian hospitals. The Hotel-Dieu has been generally thought to be very fatal to those who have been operated on within its walls; but amongst the *nine* hospitals it occupied the *sixth* place; la Charité the second place for amputations for disease; the third for amputations after injuries. In the most successful hospital the mortality for the first class of amputations was 1 in five; in the least successful 9 in 10; thus making the enormous difference of from 20 to 90 per cent.

For the second class of amputations (after injuries), it was 3 in 10, in the most successful hospital; 5 in 5 in the least successful, showing a difference of from 30 to 100 per cent.

If we endeavour to ascertain the cause of this extraordinary difference of mortality after amputations in the different hospitals, we arrive at some very curious and interesting results.

The mortality after amputations is not explained by the general mortality of the hospital, nor by the cost of each patient, for the mortality was least in the hospital which expended least, and greatest in that where the cost of each patient was greatest. The topographical position of the hospital did not explain the point, for the most fortunate and the least successful hospital, were placed in exactly the same circumstances with respect to position. Neither did the quantity of air, light, &c. in the wards of the hospitals account for the difference mentioned. The only point which the researches of M. Malgaigne have enabled him to determine relative to the question is, that the mortality diminishes in proportion to the small number of patients entrusted to the care of each surgeon.—*Arch. Gen. de Med.*, May, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JUNE 11, 1842.

The various questions connected with public health are gradually forcing themselves on the attention of the executive government of these realms.

In the absence of any responsible body corresponding to a board of health, or of any laws or regulations appertaining to the sanatory condition of the people, it is only on extraordinary occasions and as a result of private exertion that we have to expect any attempt to correct the innumerable abuses engendered by neglect, apathy, or ignorance. A law for the regulation of the medical profession has, indeed, been promised to us, and the "long-looked-for must come at last;" in the mean time, the important duty of protecting the lives and health of her Majesty's subjects is thrown on a few benevolent members of the House of Commons. The government appears ready to adopt suggestions, but either through incapacity, indifference, or want of time, studiously avoids taking on itself the initiative of any proposition connected with the public health.

The proceedings in the House of Commons on Tuesday last afford ample illustration of what we have just advanced.

The question of the employment of children under ground was brought forward by Lord Ashley, in a speech which excited the deepest interest on all sides of the house, and was received in a manner which clearly proves that when abuses of a similar kind are

clearly pointed out, every disposition exists to apply to them a prompt and effective remedy.

The moral and physical effects of this unchristian and barbarous practice were forcibly exposed by the noble lord. With the moral part of the question we have no special concern; but the physical effects of the employment of children in mines are a legitimate object of our inquiry, and we shall, therefore, endeavour to comprise in a few observations the numerous facts disclosed in Lord Ashley's eloquent discourse.

The healthful development of the vegetable kingdom depends, as we all know, on the presence of light. Withdraw from a flower the genial rays of the sun, and it soon droops, withers, and dies. The animal kingdom, also, would seem to require the enjoyment of a certain quantity of light for the due exercise of its functions. M. Baudelocque, of Paris, has clearly proved the influence exercised by a want of solar light in the production of scrofulous disorders. The feeble organisation of the child especially requires the influence of the sun's rays; yet thousands of unhappy children are committed, from their tenderest years, to abominable dungeons, in which they are forced to undergo the most distressing—the most revolting species of labour.

The deeds done in mines may truly be termed deeds of darkness. It would seem that the image of man has disappeared in these loathsome caverns, where children of four years old crawl about, in the posture of reptiles, naked and chained like the beasts of the field.

The age at which children commence to work in certain coal-mines is almost incredible. In South Wales (Lord Ashley informs us) it is not unusual to take them to the pits at *the age of four years*, and many are absolutely *carried* to the work; near Oldham, also, they commence at the same age; in the East of Scotland children are sent to work in the mines at the age of five and six years; in the West Riding of Yorkshire, at the same early age. Many children are employed in North Durham and Northumberland at five and between five and six; in different other parts of England the ages of the children who work in the mines vary from five to nine years. Dr. Mitchell, one of the commissioners, observes, "Though the very young children are not many in proportion, there are still such a number as is painful to contemplate, and which the great coal-owners will, perhaps, now learn for the first time; and I feel a firm belief that they will do so with sorrow and regret."

The only exception to this distressing picture is afforded by Ireland. There is not a single example of females or children of tender years being employed in under-ground work in the coal-mines of Ireland; and in allusion to this fact, Lord Ashley observed, that "he had often admired the generosity of the Irish people, and must say, that if this is to be taken as a specimen of their barbarism, he would not exchange it for all the refinement and polish of the most civilised nations of the globe."

The next point to which Lord Ashley directs attention is the character of the localities to which the children are consigned. These unfortunate victims of the commercial prosperity of England are not only compelled to work at an age utterly unsuited for labour, but are often shut up in holes and caverns unfitted for the reception of beasts. When the seams of coal are deep, the working-places are comparatively comfortable and well ventilated. In many mines the children are exposed to every species of hardship; thus, in the West Riding of Yorkshire there are few collieries where the main road exceeds a yard in height; in some it does not exceed twenty-eight, twenty-six, or even twenty-two inches. In East Scotland, where the side roads do not exceed from twenty-two to twenty-eight inches in height, the working-places are occasionally one hundred to two hundred yards distant from the main road, so that the females have to crawl backwards and forwards, with their small carts, in seams often not exceeding twenty-two to twenty-eight inches in height.

In Oldham, some of the road-ways are not twenty inches high, and the work is performed by little boys, who are compelled, in a state of nudity, to drag sledge-tubs through the mud and water, by means of a chain attached round their waists. Generally speaking, but little attention is paid to the drainage or ventilation of the mines. In East Scotland the mines are described as being in a most deplorable state of ventilation, and the drainage is equally bad. Black damp is frequent, and explosions are constantly taking place. Indeed, the loss of life or limb is of such constant occurrence, that fatal accidents excite no surprise amongst the inhabitants of those dreary and savage regions. One of the witnesses examined by the commission says, "There are so many killed that it becomes quite customary to expect such things, and people say, 'Oh, it is only a collier;' there would be more feeling exhibited if a policeman were to kill a dog in the streets."

In many of the collieries the pits are so wet that the people have to work all day over their shoes in water, while a constant dripping, or even rain, comes down from the roof; the children especially complain bitterly of this, which acts in a most injurious manner on their health.

The nature of the employment inflicted on these under-ground slaves next demands our attention. The practice of making young girls and tender children drag loads after them, by means of the girdle and chain, prevails to a lamentable extent. It is general in Shropshire, in Derbyshire, in the West Riding of Yorkshire, in Lancashire, in Cheshire, in the East of Scotland, in North and South Wales, and in South

Gloucestershire. The child has a girdle bound round its waist, to which is attached a chain, which passes under the legs, and is tied to the cart. The child is obliged to creep on all fours, and the chain passes under what, therefore, in that posture, may be called the hind legs; and thus they have to crawl through avenues not so good as a common sewer, and oftentimes as much neglected. This kind of labour they have to continue during several hours, in a temperature described as perfectly intolerable.

"In the East of Scotland," says the commissioner, "the persons employed in coal-bearing are almost always girls and women. They carry coal on their backs on unrailed roads, with burdens varying from ¾ cwt. to 3 cwt.—a cruel slaving," says the sub-commissioner, "revolting to humanity. I found a little girl, only six years old, carrying ½ cwt., and making regularly fourteen long journies a day. With a burden, varying from 1 cwt. to 1½ cwt., the height ascended and the distance along the roads, added together, exceeded in each journey the height of St. Paul's Cathedral." Thus we find a child of six years old with a burden of at least half a hundred weight, going fourteen times a day a journey equal in distance to the height of St. Paul's Cathedral.

Even pregnant women are compelled to crawl through mud and water, with a belt round the waist, and a chain between the legs, until abortion takes place. One poor Scotchwoman said, "From the great sore labour, false births are frequent and very dangerous;" and another, "It is only horse work, and ruins the women; it crushes their haunches, bends their ancles, and makes them old women at forty."

The species of labour thus inflicted on the underground inhabitants of coal-mines is prolonged to the utmost period of time. The regular hours of work for children and young people are rarely less than eleven, more often twelve, in some districts thirteen. In Derbyshire children work sixteen hours out of the twenty-four. In the East of Scotland the labour is often continued, on alternate days, at least fifteen, sixteen, seventeen, and eighteen hours out of the twenty-four.

The effects of such excessive labour, on persons of tender age and in unwholesome localities, must, of necessity, be highly injurious to life and health. Lord Ashley has not brought forward any statistical tables to show the mean duration of human life under these circumstances; but the medical witnesses, examined by the commission, were unanimous in attributing to them disastrous influences.

The physical effects of this system of labour may be classed, according to Lord Ashley, under the following heads:—Stinted growth, crippled gait, irritation of the head, back, and feet, a variety of diseases, premature old age, and death. Mr. Sharpe, of Bradford, notices the development of scrofula and deformities. Dr. Scott Allison likewise mentions that diseases of the spine are very common and very serious. Most colliers, at the age of thirty, become asthmatic, and are finally cut off by its lingering effects. Diseases of the heart are also very frequent; and lastly, the men are occasionally subject to a carbonaceous infiltration into the substance of the lungs, which invariably terminates in death.

We have thus briefly alluded to the condition of the working classes in mines, indicated the causes which must act injuriously on their health, and pointed out some of the physical effects resulting from the unhappy condition in which the underground labourers are placed.

To Lord Ashley is due the highest praise for the manner in which he has brought forward this question, and the noble zeal he has displayed in the cause of humanity. We regret, however, to see that he has avoided touching on some important points, which might have been brought before the notice of the legislature. The remedies proposed by Lord Ashley for the removal of the evils pointed out by him are—absolute prohibition of the employment of females; exclusion of all boys under thirteen years of age from the mines; and, finally, the restriction to the age of twenty-one of persons employed in charge of an engine or engine-house.

These are, undoubtedly, excellent measures; but when the noble lord undertook to legislate on the subject, it were to be desired that his protecting care extended to boys over thirteen years of age and adults. The ventilation and drainage of the mines are in a most deplorable state; the destruction of human life from coal damp and explosions is great; the health of the workman is broken down by a variety of causes, which may be avoided or neutralised. But to effect all this the co-operation of scientific men is required; of local sanatory boards, capable of detecting the causes of insalubrity, and pointing out their remedies. Our executive, however, disdains to imitate the example of all other enlightened governments in this matter, and Lord Ashley probably thought it inexpedient to dwell upon topics which would have excited neither interest nor attention.

STATISTICS OF PHTHISIS IN THE NORTH OF AFRICA.

M. Guyon thinks that phthisis is a rare disease in the French possessions in Northern Africa. The following is the number of consumptive patients who died during the years 1838 to 1841 inclusive, at Algiers, as far as it could be ascertained:—

Moors, 78 from phthisis in a general mortality of 3,177. Jews, 19 from phthisis, general mortality, 702. Europeans, 137 from phthisis, general mortality, 2,794.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

May 24, 1842.

Dr. Williams, President.

Cases of Malformation of the Heart. By Bell Fletcher, M.D., Physician to the General Dispensary, Birmingham.

The first of these was one of aneurism and dilatation of the pulmonary artery, malformation of the heart and arteries. The patient was a young woman, aged nineteen, who, with the exception of slight cough, had enjoyed good health up to the age of sixteen; since that time she has had frequent attacks of pain in the chest, cough, and dyspnœa. She was first seen by the author in August, 1839, when she had cough and dyspnœa, with slight hæmoptysis. On the left side of the sternum, between the second and third ribs, there was a superficial pulsation, with purring tremor, and a loud rasping souffle; the impulse of the heart was normal. She recovered under the use of the remedies employed, but had several similar attacks between that time and December, 1840, when she had severe inflammation of the lungs. At this time the pulsation of the chest mentioned above was more extensive, the souffle louder, and it had assumed a *see-saw* character, masking the sounds of the heart. The patient lingered for some time, and though relieved by treatment, died rather suddenly on May 1.

Examination after Death.—Our account of the appearances must be confined to the state of the heart and great vessels. The heart was about twice its natural size; its parietes of the natural thickness; the dilatation being equal in all the cavities. The right auricle, excepting the dilatation and hypertrophy, perfectly normal; the tricuspid valves healthy. The auriculo-ventricular opening is dilated, so as to render the valves somewhat ineffective. In the right ventricle the columnæ carneæ are thicker than normal; the orifice of communication with the pulmonary artery is much dilated. Immediately below the opening is a communication with the left ventricle, which measures about one-third of an inch across, and one-eighth from above downwards. The two anterior semilunar valves are perfect, of the normal size, but much thickened; the posterior one imperfect, being so narrow and constricted in its middle portion as to be a mere band-like projection from the artery. The pulmonary artery is much dilated, being five inches and three-quarters in its greatest circumference (internal measure); the branches of the pulmonary artery are much dilated. The left auricle is healthy, save the dilatation and hypertrophy; the auriculo-ventricular opening is dilated; the mitral valve is normal in structure, but not sufficient to close the dilated opening perfectly. In the left ventricle the columnæ carneæ are thicker than usual, and at the base of the cavity is seen the opening of communication with the right ventricle. The opening of the aorta is rather dilated; semilunar valves healthy. The ascending aorta is dilated about one-half beyond its normal size. The distribution of the arteries from its arch may be considered more as divisions of the artery than branches. After giving off these it is contracted to about one-third of its capacity in the ascending portion, and the walls of the vessel are thinned in this situation. This contraction extends from the root of the left subclavian to the joining with the ductus arteriosus, where the artery is still further contracted by a hardened thickening of the coats, projecting into its interior, so as to contract the capacity again to about one-third: so that at this point the capacity of the artery is not more than one-ninth of its ascending portion. Just on the distal side of the constriction is the communication with the ductus arteriosus, and immediately below it the artery is dilated to the usual size of the descending aorta.

The second case was one of cyanosis; the subject of it a young man, aged twenty-one. He had great dyspnœa, palpitations, anasarca, and a blue state of the skin generally. The heat of the body in the axilla, or mouth, was not more than 80° of Fahrenheit; the state of puberty was not developed. The impulse of the heart was greater than normal; there was a *bruit de souffle* beginning with the first sound of the heart, sufficiently long to mask the second; it was heard most distinctly under the middle bone of the sternum.

Examination after Death.—The heart and large veins enormously distended with dark-coloured blood; the organ much enlarged and hypertrophied. The septum of the auricles so totally absent as to convert the auricles into one; the veins of the general circulation enter it on the right side of a line drawn in the situation of where the septum should be. The auriculo-ventricular openings are large, and between them the septum of the ventricles is much notched out. The orifice of the aorta is contracted to a third of its usual capacity, and its semilunar valves are diseased and ineffective. The liver much congested and enlarged, about a third more than its usual size.

ACADEMY OF MEDICINE, PARIS.

May 31.

INJECTION OF VESSELS.

M. Poisseuille read a memoir on a new injection syringe, the pressure produced by which is constant and known.

The advantages arising from the use of this syringe are, according to the author, first, that it shows the normal dimensions of the vessels that are injected; second, that it does not lead to the risk of rupturing the vessels—an accident which so often occurs with the common syringe. The force employed can be made to correspond exactly with that exercised by the heart in the living body.

LATERAL DISTORTION OF THE SPINE.

M. Bouvier presented the spine of a man twenty-three years of age; on this were seen, first, a lateral curvature, existing chiefly between the last dorsal and first lumbar vertebræ; second, a second curvature, occupying the middle of the dorsal region, with the convexity to the right side; third, two other curvatures, placed above the latter, and occupying the superior portion of the vertebral column. There was no projection whatever of the spine backwards, and the man had been passed as a recruit.

A long discussion took place between the author and M. Guerin on the influence of muscular contraction in the production of deviations of the spine.

SCROFULOUS ULCER OF THE NECK,

PENETRATING

THE INFERIOR THYROID ARTERY.

DEATH FROM HÆMORRHAGE.

In the 77th Number, page 495, of the "Provincial Medical and Surgical Journal," is contained an account of Mr. Liston's case of carotid aneurism. The following highly interesting case, which in many respects resembles that of Mr. Liston, we extract from the "American Journal of Medical Sciences":—

"John Redmond, an Irish labourer, aged twenty-eight years, was admitted into the New York Hospital, April 30, 1841, with scrofulous enlargement of the glands of the neck. This disease, which was of long standing, had become very extensive, involving apparently the whole chain of glands on each side, and in many places had gone on to suppuration, followed by that irregular, indolent ulceration peculiar to scrofula. His general condition was very bad, his appetite poor, his muscular strength reduced, and his body emaciated; and it was more with the hope of restoring, in some measure, his general health, than of permanently curing his disease, that he was received into the hospital.

By means of iodine in various forms, used both externally and internally, with wholesome and regular diet, his general condition very much improved, though without any particular amendment of his external disease. Indeed, during the summer the disease had made considerable progress. New abscesses formed in various parts, and those which had been long open degenerated into foul, burrowing ulcers, undermining the skin in every direction, and in some instances passing deep in among the muscles. The sores presented a dirty grayish surface, from which exuded a thin, watery, and offensive discharge, and showed not the slightest disposition to take on the healing action. He was in this condition when, on the night of the 8th of November, a slight hæmorrhage took place from one of the largest and deepest of the sinuses, which was situated on the left side of the neck, about over the middle portion of the sterno-cleido-mastoid muscle. The bleeding was slight, and stopped spontaneously. Towards morning, on the night of the 9th, bleeding again took place in a much more profuse flow. The blood was of a bright arterial colour, but did not escape per saltum. A graduated compress of lint, and moderate pressure, with a bandage passed two or three times round the neck and under the right axilla, completely checked the hæmorrhage.

On the morning of the 10th, on removing the dressings to re-apply them, a large stream of arterial blood spouted out with such force as to render it evident that some large vessel was opened by the ulcerative process. The sinus was immediately stuffed full of lint, and firm pressure with the fingers kept up to prevent further bleeding, until more effectual means could be adopted. As he had lost a great deal of blood, and his pulse was becoming very feeble, a little wine gruel was given to revive him.

A consultation of the surgeons was immediately called. On removing the compress to examine the wound, another gush of blood took place, with such force as to be projected full six feet from the bed on which the patient lay, and in a stream apparently as large as an ordinary stream of urine. The compress was instantly replaced and pressure renewed, but not before the patient had lost so much blood as completely to blanch his lips and cheeks, and reduce his pulse for the time to a mere thread. The violence of the hæmorrhage precluded any hope of securing the vessel in the wound, while the swelling had produced so great a distortion of the neck as to render it impossible to determine accurately the source from which it came. It was, therefore, determined to apply a ligature to the common carotid, in the hope that that vessel, or one of its branches, might be the one involved. The operation for tying the carotid was immediately performed by Dr. Post.

An incision was made in the ordinary manner along the inner edge of the sterno-cleido-mastoid muscle, beneath which, in the usual situation of the sheath of the vessels, was found a large mass of fibrine adhering to all the tissues in that region, and confounding them together in such a manner that it was difficult to distinguish one from another. After careful dissection, chiefly with the handle of the scalpel, what appeared to be the sheath of the vessel was exposed to view and divided. A cylindrical body of the size and colour of the artery was then brought to view, and a ligature passed under it by means of Sir P. Crampton's needle. The operator, as well as several of the other surgeons of the hospital, felt the vessel under which the ligature was placed, and were convinced that it was the carotid artery, although no distinct pulsation could be felt in it; this was accounted for by the state of extreme prostration to which the patient was reduced. The ligature was then tied, without, however, any effect whatever in arresting the flow of blood. From this it was evident that the subclavian, or one of its branches, was the injured vessel; but the patient was in so prostrate a condition that it was not deemed safe to attempt anything farther in the way of an operation.

Firm pressure with the hand controlled the hæmorrhage, and was, therefore, continued, while stimulants and nourishment were freely administered, in the hope of bringing about reaction of the system. The pressure was steadily kept up through the night, during the first part of which not a drop of blood was lost. He took his drink readily, but he evidently failed, his extremities became cold, and his pulse more and more feeble. Towards morning the compress, having become very much soaked with blood, and consequently very slippery, by a slight movement of the patient in his sleep, slipped from its place, and before the attendant could replace it, blood escaped in sufficient quantity to decide his fate. He died in about two hours after this unfortunate accident.

A careful dissection of the parts was made after death. The ligature, which was thought to have been placed round the carotid artery, was found to embrace only a band of organised lymph, situated immediately anterior to, and in fact upon the sheath of the vessels, which were in a perfectly healthy condition. On removing the coagula and cleansing the ulcer, it was found to have extended backwards, and downward towards the subclavian artery, the upper surface of which, just within the thyroid axis, it had reached

within a quarter of an inch. On the bottom of the wound lay the thyroid axis exposed to view, and from it given off the inferior thyroid, running upwards and forwards, and destroyed by ulceration in one half of its circumference for the space of an inch. The ulcerative process involved, to a slight extent, the thyroid axis itself. The thyroid artery, beyond the ulcerated opening, was completely obliterated, showing previous inflammation of the artery. Indeed, it would appear probable that the whole of the thyroid artery had been obliterated by coagula before the ulceration commenced, and it is probable that the whole of the artery would soon have been destroyed without danger, had not the ulceration reached the thyroid axis. This, of course, was not protected by coagula, and as soon as its coats were penetrated, hæmorrhage ensued. The other arteries of the body, as far as examined, were healthy."

MEDICAL BENEVOLENT SOCIETY.

This society, which is formed for the purpose of affording relief to such of its members resident in England and Wales as shall be, through mental or bodily infirmity, or other causes, in distressed circumstances, and who shall be considered as requiring and deserving of pecuniary assistance, held its commemorative dinner on Saturday, at the Freemasons' Tavern.

Mr. B. B. Cabbell took the chair, and was supported by Sir C. M. Clarke, Dr. Clutterbuck, Sir J. Eyre, Dr. P. M. Latham, Dr. Burrows, Dr. G. Burrows, Dr. Macintyre, Mr. R. Pennington, Mr. T. A. Stone, Mr. Blagden, Mr. Pope, Mr. Best, Mr. Turner, Mr. Propert, Mr. E. White, and several other gentlemen of eminence in their profession.

Mr. B. B. Cabbell, in proposing the health of the Queen, made an allusion to the danger from which her Majesty had providentially escaped, and felt confident that the toast would be received with more than ordinary feelings.

After the other usual toasts, the Chairman gave "Dr. Latham, the President, and Vice-Presidents of the Medical Benevolent Society."

Dr. P. M. Latham returned thanks.

The Chairman, in giving the next toast, dwelt on the small support afforded to the society by the profession, and expressed his regret that it was not more ably supported. The medical profession, he said, ought to form a kind of family compact, and subscribe liberally and bountifully to the society, and by a high and noble feeling show that they were willing to assist the society in carying out the objects for which it was instituted. Indeed, prudence and self-interest ought to be a sufficient inducement to the less opulent of the profession to become members of the society.

The Chairman then gave, "Prosperity to the Medical Benevolent Society."

Mr. Pope, the acting treasurer, returned thanks for himself and for his colleagues. He stated that there were not fewer than 2,000 of the medical profession resident in London, and not less than 8,000 resident in the county, all of whom might become recipients or benefactors. That was the spirit of the society, and he felt assured that the society need only be known to be appreciated and supported. He regretted that much misunderstanding had gone abroad with respect to the objects of the society. It was not, he said, the wish of the directors to dole out such a niggardly and paltry pittance to its objects as they would be degraded by accepting, but to afford such timely and efficient relief as would enable them, when overtaken by unforeseen difficulties, boldly to meet them, and thereby retain their position in the profession, and in doing generally what it was the earnest wish of the directors of the institution to advance. In illustration of these principles, he mentioned two cases which had been relieved during the last year. The first was that of a gentleman of long standing in his profession, who, from illness and losses in his family, had found himself unable to meet his engagements at the close of the year, and to whom the society had advanced £110. The second was the case of a much younger man, who, in the pursuit of his profession, experienced an accident, which for a time paralysed both mind and body, during which time his circumstances became embarrassed, and on his condition being made known to the society, they presented him with £150, which enabled him not only to meet his difficulties, but to pursue his profession with honour and credit, and to return to the society as a donation a portion of the sum given. It was his desire to set before his medical brethren the fact that the society consisted of only 149 members, and out of that number 74 were life members, leaving only 78 subscribing members. The medical professor was known to feel great sympathy for his fellow-creatures; and how much more ought he to show to the members of his own profession? He was not without hope that there would shortly be an accession to the number of the members.

Sir C. M. Clarke then gave the "Health of the Chairman," who returned thanks.

The Chairman then gave the "Healths of Dr. Clutterbuck and Mr. Pope."

Dr. Clutterbuck returned thanks.

Several other toasts were then given, and briefly acknowledged, and the company separated soon after 11 o'clock.

We regret to say that the sum subscribed did not exceed £100, the chairman having subscribed £25 of that amount.

EXPLOSION AT APOTHECARIES' HALL.—DEATH OF MR. HENNELL.

At a few minutes past ten o'clock on Saturday morning an explosion took place at Apothecaries' Hall, at the back of the premises adjoining the laboratory, which caused the death of Mr. Hennell, the Company's chemical operator. It appears that, at the request of the Directors of the East India Company, the Apothecaries' Company had undertaken, contrary to their usual practice, the preparation of fulminating mercury for the percussion caps to be used by the troops of the company in the East Indies. Both on Friday and Saturday Mr. Hennell, the chemical operator, had been engaged in preparing about six pounds of fulminating mercury, which, at the time of its ex-

plosion was mixed with full one-third its weight of water. At the moment the accident occurred it is believed that Mr. Hennell was standing by a large block of wood, about three feet high, and about three feet in circumference, on which was placed a white evaporating dish containing the mercury; the situation of the apparatus was between the still-house and the gas-room, where gas was formerly manufactured for the use of the establishment, but which is now applied to other purposes. About 400 grains of the preparation had been taken from a steam-drying stove at a temperature of about 115 by Mr. Hennell, in order to ascertain its strength. Two or three slight explosions were heard, occasioned by Mr. Hennell striking a grain or two in the still-house. Mr. Hennell then proceeded to the block of wood beforementioned, for the purpose of mixing two parcels of the powder, when, from some cause, which of course cannot be explained, the explosion took place, striking Mr. Hennell immediately below the chest, and, taking an upward direction, carried away the right arm and the same side of the face, together with the whole of the upper portion of the head, laying open the entire chest, and exhibiting the action of the heart and lungs. Some parts of the remains were scattered over the tops of the building, and other portions were actually picked up by the workmen upon the roofs of the adjoining houses. No other person was injured, although three men were thrown down by the concussion. The glass contained in the whole of the window-frames (made of iron) was broken. The block of wood upon which the dish containing the powder was placed was so much splintered as to appear as though it had been struck by electric fluid. The large paving-stone upon which the block stood is likewise shattered into twenty pieces. About a yard square, in the middle of a wall nearly two feet thick, was thrown inwards four or five inches by the force of the explosion.

The deceased gentleman was held in the highest esteem by every person in the establishment; he had been formerly apprenticed to the company, and had been engaged in their service thirty years.

A SUBSTITUTE FOR COPAIBA.

The gurjun balsam varies in consistence from that of thick honey to a light oily liquid. The colour of a fine specimen of thick gurjun obtained from Captain Jenkins, of Assam, was a pale grey; specimens sent from Rangoon by Mr. Speir were a light brown. As found in the bazaar this substance generally occurs as a brown, oily looking, semi-transparent liquid, in odour strongly resembling a mixture of balsam of copaiba with a small portion of naptha. The Sp. Gr. is 0.962. It is totally insoluble in water, freely in warm alcohol at 835°, and difficultly in æther. Submitted to heat, about 5 per 100 of water first passes over; a yellowish white matter then sublimes and covers the upper part of the retort; this substance is solid, crystallisable, soluble in essential oils, and possesses many of the properties of benzoic acid. Its proportion is not more than 1 per 100. Continuing the distillation, from 35 to 40 parts per 100 of essential oil are obtained, and a thick resin remains in the retort.

The essential oil when freed from water by prolonged contact with dry chloride of calcium, and distilled a second time, is transparent and nearly colourless, of specific gravity 934, boils at 240°; it is soluble in alcohol, æther, naptha, and the essential and fixed oils. It dissolves caoutchouc, copal, vateria resin, and solid gluten. Potassium and sodium retain their lustre in it, and undergo no change; the taste is acrid, sweetish, and heavy; its odour closely resembles that of the essential oil of copaiba.

The residual resin is light brown, easily fusible, of copaibic smell, and faintly acrid taste; absolute alcohol divides it into two parts, *a* and *b*, of which the insoluble part *b* dissolves in spirit at ·835. Both possess acid properties, and are closely analogous to the copaiba acid resins. Like one of these the gurjun resin *a* forms a saline compound with magnesia, which dissolves in a mixture of the resin *b* and essential oil.

The close resemblance in the physical and chemical properties of this gurjun and copaiba balsam led to the institution of an extensive set of experiments by the editor (Dr. O'Shaughnessy) on the medicinal effects of the former in the treatment of gonorrhœa. The results, which have been laid before the profession, and which have been confirmed by trials made by other practitioners, seem perfectly conclusive that in the treatment of gonorrhœa, gleet, and similar affections of the urinary organs, the essential oil of gurjun is nearly equal in efficacy to the South American drug.

The essential oil may be given in 10 to 30 drop doses in mucilage, milk, rice water, or thin gruel, and repeated thrice or still more frequently daily. It generally causes a sensation of warmth at the epigastrium, eructations, and sometimes slight purging. It communicates a strong smell of turpentine to the urine, which it increases remarkably in quantity. Some obstinate cases of chronic gonorrhœa and gleet, which had long resisted copaiba and cubebs, have been cured by this remedy in the course of the experiments alluded to.—*Bengal Dispensatory.*

INJECTIONS OF THE NITRATE OF SILVER.

Dr. Daniel, of Cetto, describes the case of a Venetian, thirty-two years old, labouring under catarrh of the bladder, complicated with syphilis, impotence, and more or less involuntary discharge of semen every morning. The syphilitic complaint was treated with baths containing the deuto-chloride of mercury, and for the affection of the bladder and caput galinaginis he was ordered an injection of 125 scruples of distilled water, in which had been dissolved 32 grains of nitrate of silver. This was injected into the bladder with the best effects. The strength of the solution was gradually increased, and the patient was cured in less than three months of his syphilis, vesical catarrh, and impotence. Dr. Daniel heard afterwards that he had recovered, and that his wife was pregnant.—*Journal de Med. Pratique de Montpellier.*

RETROSPECT OF THE MEDICAL SCIENCES.

ULTIMATE SECRETING STRUCTURE.

Mr. Goodsir, in a communication read before the Royal Society of Edinburgh, on the ultimate secreting structure, and on the laws of its function, after referring to the labours of those anatomists who had confirmed Malpighi's doctrine of the follicular nature of gland ducts, alludes to Purkinje's hypothesis of the secreting function of the nucleated corpuscles which line these ducts. He then proceeds to state, that no anatomist had hitherto proved that secretion takes place within the primitive nucleated cell itself, or had pointed out the intimate nature of the changes which go on in a secreting organ during the performance of its function. The ink of the cephalopoda and the purple of janthina and aplysia, bile in an extensive series selected from the principal divisions of the animal kingdoms, urine in the mollusk, milk, &c., are all considered by Mr. Goodsir as examples of secretions detected in the cavities of nucleated cells of various glands and secreting surfaces.

The wall is believed by the author to be the part of the cell engaged in the process of secretion. The cavity contains the secreted substance, and the nucleus is the reproductive organ of the cell. A primitive cell engaged in secretion is denominated by him a primary secreting cell; and each cell of this kind is endowed with its own peculiar property, according to the organ in which it is situated. The discovery of the secreting agency of the primitive cell does not remove the principal mystery in which the function has always been involved; but the general fact that the primitive cell is the ultimate secreting structure, is of great value in physiological science, inasmuch as it connects secretion with growth, as functions repeated by the same laws, and explains one of the greatest difficulties in physiology—viz., why a secretion flows from the free surface of a secreting membrane—the secretion exists only on the free surface of the ripe cells which constitute that surface.

The origin, development, and disappearance of the primary secreting cell, a subject necessarily involving the description of the various minute arrangements of glands and other secreting organs, come next under consideration. The testicle of the squalus cornubicus and the liver of the careinus mænas are adduced as examples of two orders of glands, denominated by our author vesicular and follicular. The changes which occur in the first order of glands consist in the formation and disappearance of closed vesicles or acini. Each acinus might be first a single cell, the primary or germinal cell; or, secondly, it might consist of two or more cells enclosed in the primary cell, and produced from its nucleus. These enclosed cells are the secondary cells of the acinus, and in their cavities, between their nuclei and cell-walls, the peculiar secretion of the gland is contained. The primary cell, with its included group of cells, each full of secretion, is appended to the extremity of one of the terminal ducts, and consequently does not communicate with that duct, a diaphragm formed by a portion of the primary cell wall stretching across the pedicle. When the secretion in the group of cells is fully elaborated, the diaphragm dissolves or gives way, the cells burst, and the secretion flows along the ducts, the acinus disappearing, and making room for a neighbouring acinus, which has in the mean time been advancing in a similar manner. The whole parenchyma of glands of this order is thus, according to Mr. Goodsir, in a constant state of change—of development, maturity, and atrophy—this series of changes being directly proportional to the profuseness of the secretion.

In the second order of glands, the follicular, the germinal cell or spot is situated at the blind extremity of the follicle, and the secreting cells, as they advance along the follicle, become distended with their peculiar secretion.

From all these facts, Mr. Goodsir infers that secretion is a function of, and takes place within, the nucleated cell; and that growth and secretion are identical—the same process under different circumstances. —*London and Edinburgh Monthly Medical Journal.*

LUPUS.

Dr. Payan, of Aix, principal physician to the Hotel-Dieu, is of opinion that lupus is a disease of a local character, totally independent of a constitutional origin. The treatment, which must be purely local, must be varied according to the cases, the topical applications being selected from those which, like styrax and the unguentum styracis, are sufficiently stimulant to modify the diseased action of the ulcerated surface, or, like the caustics, to disorganise its structure. Liquid caustics, such as nitric acid and the acid nitrate of mercury, are of but little use, because their action is too transitory. Rousselot's powder is the caustic preparation preferred by M. Payan; it is composed of four parts of powdered white arsenic, thirty of cinnabar, and thirty of sanguis draconis. Corrosive sublimate or the caustic paste of Vienna may also be employed. In the treatment of lupus, especially when cicatrisation is taking place, this pathological law must be remembered, that when any wound has been open a long while, it becomes a natural emunctory, requiring the formation of an issue, in order that the cure may be perfect, and the general health unaffected. In support of these statements M. Payan narrates four cases, the first of which was cured by the application of the nitrate of mercury and the liquid styrax, the second and third by Rousselot's powder, and the fourth by the Vienna paste.—*Journ. de Méd. Prat. de Montpellier.*

RUPTURE OF THE BOWEL.

Most serious mischief sometimes happens when a hernia exists, from a direct blow either on the lower part of the abdomen, or by the person being forced against some unyielding body, by which the truss is pushed aside, and at the same instant the intestine, descending into the sac, receives the full force of the collision. When the hernia is not supported by a truss, its descent takes place, and the blow is received directly upon the intestine. The extent of injury will vary according to the violence of the blow. The contusion may be insufficient to burst the bowel, or occasion such a lesion as shall end in gangrene, its effects being only inflammation of the coats of the intestine; or the violence may be such as at once to rupture the bowel, or, failing that, to cause sloughing

and escape of the fæces. The mere contusion should be treated by returning the bowel into the abdomen, and keeping it perfectly at rest, abstaining altogether from the administration of purgatives. A bruised bowel is placed by nature in a state of rest; the exhaustion of the nervous energy of the part diminishes in the muscular tissue the disposition to contract, and this inactivity of the bowel should be encouraged, for its safety depends on the non-occurrence of inflammation. If this state be induced by improper interference, sloughing or ulceration will probably be the result. Food should be given in the smallest quantity, and in the liquid form. An occasional enema, to unload the larger intestines, is all that is required, unless inflammation supervene, when opium may be had recourse to; if calomel be adjoined, care must be taken that the action of the opiate preponderate.

If the contusion be so severe as to destroy the vitality of the bowel without rupturing it, the condition of the patient, both immediately after the accident and for several days subsequently, sufficiently attests the severity of the lesion. Severe but transient collapse ensues, speedily followed by reaction and inflammatory excitement. In this case, also, the hernia is to be replaced with gentleness. The danger of extravasation will not be increased by this proceeding, for, should sloughing ensue, the slough may be walled in by adhesion of the surrounding peritoneum; or, should the process of adhesion not take place, the sac will receive the fæcal matter, and quickly give intelligence of the impending mischief, by the tumefaction that will ensue within the scrotum. When this takes place, or the slough separates, and the contents of the bowel are discharged into the sac, this latter should be opened, to give a free exit to the extravasated matters. In the most severe injuries, when the rent in the bowel is extensive, and the fæcal effusion almost instantaneous, the symptoms at once assume a character too marked to be mistaken, and the only mode of affording relief—namely, that of at once opening the hernial sac—is obviously pointed out. When the opening is so small as to prevent, for a time, any escape of the contents of the intestine, there is not any necessity for any decisive step being taken until called for by the unequivocal collapse and pain that attends extravasation. When extravasation begins, and not before, the surgeon's interference is called for; no time should then be lost in affording an outlet to the offending fluids.

In illustration of these statements, which are from the pen of Mr. Aston Key, four cases are narrated. In the first and second, both patients being under Mr. Key's care, severe symptoms indicative of intestinal injury were present. The sac was opened, the intestine sloughed, the fæces were discharged by the artificial opening, which gradually closed, and the patients were discharged cured. In the two other cases the operation was not performed, and the patients were lost.—*Guy's Hospital Reports.*

INTRODUCTION OF AIR INTO VEINS.

Dr. G. Cappelletti, of Trieste, has published two cases of this accident, which is in general so fatal, but which was, in these instances, followed by recovery. The first case was that of a widow lady affected with ulcerated cancer of the breast, a relapse after two previous operations, and which Dr. Cappelletti removed, at the earnest request of the patient. The cancer extended to the armpit, but the glands in the axilla were not diseased. While the adhesions near the hollow of the axilla were being divided, and a portion of the pectoralis major, which was diseased, was being removed, a peculiar sound was heard, at first supposed to be caused by the hardness and resistance of the muscular fibre, but which was soon recognised as the peculiar hissing noise described by Amussat. Scarcely was it heard when the patient sighed deeply, exclaimed that she was dying, and fell almost lifeless into the arms of a surgeon who was present. A sponge was immediately applied to the wound, in order to prevent, by moderate pressure, the admission of any more air. The pulse was frequent, irregular, and intermittent; respiration difficult; the eyes half closed; and the patient from time to time applied her hand to the region of the heart, taking frequent and painful inspirations. The remedies usually employed in cases of syncope were had recourse to, and, contrary to expectation, the pulse became gradually more regular, respiration less laborious, and in less than ten minutes all the alarming symptoms had disappeared. The patient got well, and had not had a relapse of the cancer at the date of the report, more than a year after the operation. The patient described her sensations during the alarming condition to which she was reduced as follows:—She was not at any time entirely deprived of the use of her senses, but was utterly incapable of speaking a word; she felt an acute pain at the heart, as if it were about to cease to beat, and as if she must die.

In the second case, Professor Koepl, senior surgeon of the hospital at Trieste, was removing a large medullary fungus from the cheek of a man, fifty years old, which extended down to the neck, and had nearly completed the operation, when the peculiar pathognomonic hissing sound was heard, and the patient, uttering a sharp cry, dropped, as if struck by lightning. The cause was evident, the entry of air by the external jugular vein. Compression was immediately applied over the wounded vessel, and a ligature thrown around the tumour. The patient recovered in ten minutes from this dreadful state, contrary to the anticipation of the operator, who fully expected his death.—*Annali Universali di Medicina.*

DEAFNESS FROM QUINA.

Dr. Lugeol, a physician residing at Havannah, has published the particulars of several cases, in treating which he gave large doses of the sulphate of quinine, the administration of which was followed by more or less deafness, lasting from twelve hours to two or three days, and disappearing gradually, without leaving any injurious effect behind it.—*Bulletin Général de Thérapeutique.*

PURIFICATION OF CREAM OF TARTAR.

In order to free the cream of tartar from lime and copper, M. Duflos puts twenty-four pounds of the crystals of white tartar in a perforated porcelain capsule, which he suspends in a pot, filled with a mixture of two pounds of muriatic acid with twelve of water, so that the crystals of tartar are covered with the diluted muriatic acid. He leaves it all in contact at a gentle heat for twenty-four hours, when he withdraws the crystals, drains, washes, and dries them.—*Ibid.*

THE USES OF THE LIVER.

Dr. Bostock, in a communication under this title, published in the "London and Edinburgh Monthly Medical Journal," speaks of the liver as a subsidiary organ, serving, with the lungs and kidneys, to remove any excess of the materials of nutrition that may exist in the system. The elements which enter into the composition of any aliment, and which, after due elaboration, are deposited in the blood, may be considered as essentially consisting of carbon, azote, hydrogen, and oxygen; and with respect to at least the three first of these elements, a distinct organ is provided for the removal of any superfluous quantity of them which may exist in the blood, after supplying all the wants of the system. The processes by which this removal is effected, and which may be styled depurative, are performed for the three elements respectively by the lungs, kidneys, and liver.

The depurative process carried on in the lungs consists in the evolution of caloric, an effect produced by a portion of the oxygen of the inspired air combining with a portion of the carbon of the venous blood, which latter, were it to remain in excess in the circulating fluid, would render it totally unfit to perform its appropriate functions, or even for the temporary continuance of life. The nitrogen is removed from the system by the kidneys in the form of urea, which is eliminated from a comparatively small portion of the blood. Dr. Bostock speaks of this organ as a kind of secondary cloaca; the intestinal canal being the channel for carrying off the residual part of the food, after the separation of its nutritive matter, while the kidney discharges the heterogeneous substances which have been received by the blood-vessels, but which, being no longer required, or having performed their appropriate functions, are to be regarded as residual.

The third of the depurative processes, carried on by the liver, differs from the preceding, inasmuch as but a comparatively small portion of the blood is operated on instead of the whole mass, as in the lungs, and the blood is venous instead of arterial. The blood, after passing through the pulmonic circulation, is sent into the great systemic arteries, purified from its superfluous carbon. The excess of azote and the various saline substances are next removed by the kidney, after which the whole of the blood is returned from all parts of the body, and conveyed to the great venous trunks. A portion of this blood, selected from the anatomical relation of the parts, and not from any chemical difference in the nature and quantity of its constituents, is carried to the liver, where it is freed from superfluous matter, while a substance is generated, in the composition of which hydrogen largely enters, and which is essential to the proper action of the digestive organs. When, from any cause, a minor quantity of carbon is required for the evolution of heat in the lungs than is consistent with the healthy constitution of the blood, the liver is the organ by which the irregularity is rectified, by an increased secretion of bile, thus showing an additional provision in the systemic arrangements for the removal of any excess of carbon that may accumulate. There does not appear to be any process provided for the removal of oxygen from the blood.

OPIUM-SMOKING IN CHINA.

When a person has once contracted the habit of opium-smoking, he finds it extremely difficult to discontinue the vice; yet there are many instances of its being conquered by resolution of mind. In such attempts it is most dangerous to approach the opium-shops, as the smell of the chandoo produces an irresistible desire to indulge once more in the pernicious habit; neither can opium-smoking be suddenly abandoned without some substitute, as the most serious or even fatal consequences would ensue. The best is the tincture of the tye-chandoo (which is about one-fourth the strength of the chandoo itself), made with "lamsoo," a spirit prepared from rice, and taken in gradually diminishing doses, till the habit is broken. The chandoo is an aqueous extract of opium.

The hospitals and poor-houses are chiefly filled with opium-smokers. The baneful effects of this habit on the human constitution are stupor, forgetfulness, general deterioration of all the mental faculties, emaciation, debility, sallow complexion, lividity of lips and eyelids, languor and lack-lustre eye, appetite depraved or destroyed. In the morning these creatures have a most wretched appearance, evincing no symptoms of having been refreshed or invigorated by sleep, however profound. There is a remarkable dryness or burning in the throat, which urges them to repeat the opium-smoking. If the dose be not taken at the usual time, there is great prostration, vertigo, torpor, discharge of water from the eyes, and in some an involuntary discharge of semen, even when wide awake. If the privation be complete, a still more formidable train of symptoms appears. Coldness is felt over the whole body, with aching pains in all parts; diarrhœa comes on; the most horrid feelings of wretchedness follow, and if the poison be withheld, death terminates the victim's existence.—*Lancet.*

CÆSARIAN SECTION.

Mr. Ross, surgeon, of Invergordon, has placed another fatal case of gastro-hysterotomy on record. The patient, a woman, thirty-five years of age, was suffering from cough, asthma, and dropsy at the time, and was altogether of a broken constitution, and totally unfit to bear so serious an operation, which, however, offered the only chance of safety for her and her child. According to the report of the midwife, the poor woman had been in labour, more or less, twelve days. On examination per vaginam, the head of the child could be distinctly felt, but, from the deformed state of the outlet, nothing else could be ascertained, the tuberosities of the ischia approximating so closely that the aperture might be compared to a slit scarcely an inch in breadth, and about two inches in length, the coccyx closing up the lower part. Dr. Cameron, of Tain, assisted at the operation, which was successfully performed, as far as regards the extraction of a living child, which ultimately did well. The poor woman survived the operation five days and seven hours. Mr. Ross does not give any account of the sectio cadaveris.—*London and Edinburgh Medical Journal.*

THE AIR DOUCHE.

Among the bad effects produced by the air douche may be enumerated inflammation of the throat and Eustachian tube, and of the tympanum, which is sometimes so severe as to terminate in suppuration; emphysema caused by the laceration of the mucous

membrane of the Eustachian tube, or of the posterior nares; rupture of the membrana tympani; deliquum, which in some instances has continued so long as to threaten life, and even death itself has occurred before the instrument, which produced so awful a calamity, could be removed.—*Medical Gazette.*

NECROSIS OF THE SUPERIOR MAXILLARY BONE.

Mr. Douglas mentions a curious case he saw some time since, of spontaneous separation of the upper jaw. A boy had cancrum oris, which took on healthy action, and healed. The upper jaw however died, and came away entire, with the exception of its nasal process. It separated at the sutures from the palate bone, the vomer, the malar, and the maxilla of the opposite side. The bone is not completely developed; the two bicuspides, and the dens sapientiæ being still deep within the jaw.—*Ibid.*

IRISH MEDICAL ASSOCIATION.

We regret to say that rumours are afloat of a serious schism between some of the leading members of this association. As the day of distribution of patronage approaches, various signs of an inclination to reap the harvest show themselves, even in the most fervent patriots.

WESTMINSTER HOSPITAL.

Mr. Bennett Lucas has recently received the appointment of lecturer upon anatomy and physiology, and descriptive anatomy, in conjunction with Dr. Hunter, at the Westminster Hospital School of Medicine.

OBITUARIES.

Daniel Hanmer, Esq., surgeon, Chester; Mr. Lees, Liverpool; and William Wheeler, Esq., Pembridge, members of the Provincial Association.

At Rochester, on the 31st ult., James Jackson, M.D., assistant-surgeon to the 6th regiment of Foot.

PROMOTIONS AND APPOINTMENTS.

War-office, June 3.

17th Foot — Assistant-surgeon Alexander Smith, from the 34th, to be assistant-surgeon, vice Fraser, who exchanges.

34th—Assistant-surgeon R. W. Fraser, M.D., to the 17th, vice Smith.

99th—Staff-surgeon of the 2nd class, Arthur West, M.D., to be surgeon, vice William Williams, who retires on half pay.

Hospital Staff—Assistant-surgeon Thomas Bevan, from the 7th Dragoons, to be staff-surgeon of the 2nd class, vice Anglin, deceased.

NAVAL.

Surgeon C. R. Kinnear, to the Albatross.

Assistant-surgeon John Rees, to be surgeon.

Assistant-surgeons—H. R. Bank, to the St. Vincent; Dr. Hugh Gamber, to the Satellite; F. Negus, to the St. Vincent; C. C. Easton, to the Ætna; H. Courtenay, to the Isis; E. Evans, to the St. Vincent.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, June 3, 1842.

Samuel Coates Mason, Thomas Vallance, Thomas Ballantine, Charles Wankford Currie, Francis Goolden, Hugh Bell, John Edward Smyth, George Harday, Augustus Kingston Maybury, Stephen Moriarty, Joseph Wood Mason.

Monday, June 6, 1842.

William Hill, Charles Watkins Tilly, George Saunders, Stephen John Prach Parker, Richard Newcomb Willis, Thomas Stewart Parke, Norris Fasham Davey, Charles Theobald Staples, Thomas Ingham, Matthew Bagnell Lefebure, James Yate, Robert Haines.

APOTHECARIES' HALL.

Licentiates admitted Thursday, May 26, 1842.

H. A. Arden, Dorchester, Dorset; C. W. Chubb, Devonport; W. Skelding, Bridgenorth; W. Reynolds, Northam, Devon; F. W. Johnson, Wathington, Norfolk; J. J. C. Pilkington, Preston, Lancashire.

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An Union Surgeon.—The most complete information on the subject of poor-law medical relief may be found in the pamphlet recently published by the Provincial Association. It may be procured, through any bookseller, from the house of Sherwood and Co.

ERRATA.

Page 165, col. 2, line 45, for "unwreath," read *enwreath;* page 169, col. 1, line 45, for "Limox," read *Limax.*

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
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ADDRESS DELIVERED

BEFORE THE

MEMBERS OF THE SHEFFIELD MEDICO-CHIRURGICAL SOCIETY,

AT THE LAST

MEETING FOR THE SESSION 1841-2.

By Charles F. Favell, M.D.

Before entering on the peculiar task which has been assigned to me for this evening, I feel that it will not be ill-timed if I briefly offer a word of congratulation to the practitioners of this district on the formation and success of the Medico-Chirurgical Society of Sheffield. The existence of such a society was for a considerable period the object of ardent desire. But the failures which had attended the efforts, on former occasions repeatedly made, to carry on such an institution, discouraged many, who have long been zealous in the promotion of medical science, from entertaining a hope that such a society could be successfully established. At length, however, sixteen gentlemen were induced to sign a requisition for a general meeting of the profession, "to consider the propriety of immediately adopting measures for establishing a medical society." This meeting was holden on the 16th of September, under the presidency of Sir Arnold Knight, when it was unanimously resolved to form a society for "friendly conversation on professional subjects, the reading of cases and short essays, with discussion, the analysis of professional works, and the exhibition of anatomical preparations, normal and abnormal, and of new instruments and apparatus." The objects for which we assemble are thus clearly set forth in the first law of the society. But the law is, moreover, strict in the language of prohibition, for it proceeds to state that "medical politics, including the controverted questions of medical reform, medical etiquette, and medical education, shall be carefully avoided." Thus, then, we confine ourselves to strictly professional subjects. We meddle with no topic calculated to give pain or uneasiness to any individual, or to interfere with the happiness and harmony of our proceedings. I am perfectly satisfied that the continued exclusion of all questions which may be thought to have a *personal* bearing is essential to our future prosperity. If we should ever begin to sit in judgment on the character of each other, from that very day we may date the downfall of the society; but so long as we confine ourselves to the scientific part of our profession, and make the session which we now close a model for our future proceedings, we may confidently anticipate continued success. But what are the peculiar features which entitle the past session to be taken as a model for the future? I shall only mention two circumstances which, at first sight, may possibly be thought immaterial, but which I am, nevertheless, satisfied are of considerable importance. The first is, that the papers which have been read have been short and practical. There is a period of life when theories and hypotheses afford us most delight—when we love to weave or listen to ingenious sophistries. But time gradually begets in us a disrelish for the unreal, and we step by step become enamoured of mere matter of fact. Now, I do not hesitate to declare that it is the matter-of-fact character of the communications which have been brought before us which has given them the value which they undoubtedly possess. But the papers have been *short* as well as practical, and this is also a point of some consequence. It is tedious to listen to elaborate essays, and it is still more tedious to write them.

The second distinguishing feature of the session which I consider worthy of imitation is, that our discussions have been conversational. There has been an entire absence of formality. It has not been needful even to rise from our seats whilst engaged in the expression of our sentiments. There has been no attempt at speech-making, no striving after eloquence, no vain-glorious endeavour to make the worse appear the better part. Truth alone has been the object of our search, and she has been pursued in the spirit of gentleness and candour. One other observation I must make before passing on to the more immediate object of the present address. The tenth law of the society enacts that "five members (including the president) shall constitute a quorum." I am happy to state, that during the entire session there was not even a single night on which a greater number was not present, so that the proceedings of the society have not once been interrupted by an insufficient attendance of members.

I now pass on to give a brief *resumé* of the proceedings of the past session; and in doing this I shall almost entirely confine myself to a simple detail of recorded facts.

The subjects which have been brought before us for discussion have been of a very promiscuous character; but yet I shall venture, for the sake of convenience, to classify them. I shall be able to comprehend all the topics which have been brought before us, with two exceptions, by making four classes—one to include inflammatory affections; another, cases of abnormal cerebral circulation; a third, hæmorrhages; and a fourth, the action of remedies. To a brief notice of these various topics I proceed without further introduction.

Class I.—*Inflammatory Affections.*—I place in this division only two communications—the first was the production of Sir Arnold Knight, and the second was from Dr. Harwood. The subject of croup was that to which our attention was specially directed by Sir Arnold; the case which formed the basis of his

remarks was one of considerable interest, and gave rise to an animated conversation. It will be necessary that I should concisely allude both to the one and the other.

At nine o'clock on Sunday morning, October 10, Sir Arnold was requested to visit a little boy, about four years of age, whom he found to be in a very advanced stage of a severe but neglected attack of croup, which had apparently been induced by excessive and continued crying. Two days previously he had been taken to a medical practitioner, who told the friends the boy had got the croup, and gave them some powders and a blister. The former were given but the latter was not applied. On the morning of the 10th the countenance was pale, the lips livid, pulse quick, and the breathing and cough were of that kind which are peculiar to the advanced stage of croup. Sir Arnold was of opinion that the application of leeches would only increase further depression, and that the danger was too immediate to wait for the slow operation of a blister. He therefore omitted both these common remedies, but ordered a sinapism to be applied to the upper part of the chest—the feet to be immersed in hot water with mustard, and five grains of calomel to be taken every hour till it should occasion either vomiting or purging. At one o'clock but little change was perceptible. At seven, p.m., when he was again visited, four powders had been administered; they had produced no effect on the stomach or bowels, but the little patient was not worse. Directions were given to discontinue the powders and to administer a teaspoonful of ipecacuanha wine every quarter of an hour till vomiting was produced, and a blister was to be placed between the shoulders. On the following morning the patient appeared somewhat better. After the second dose of ipecacuanha wine some vomiting had been induced, and a quantity of phlegm had also been expectorated but swallowed. In the evening the little boy was so much worse that Sir Arnold informed the friends he would not survive the night. The ipecacuanha wine was to be repeated, however, and two more calomel powders to be given as before. Early on the following morning his attendants thought him dying, but almost immediately afterwards a great change for the better occurred; and when Sir Arnold paid his visit, he found his patient sitting up, and amusing himself with the keys of a piano-forte. His improvement continued to be progressive, although for a few days the little fellow appeared delicate.

Before noticing the discussion to which this case gave rise, I may remark, that there are two important lessons of a general character to be learned from it. The first is, that it is unwise confidently to predict the death of children labouring under inflammatory affections. Medical men are occasionally deceived in their prognosis in the case of adults, but I believe they much more frequently fall into error when children are the subjects of treatment. I have frequently been surprised to see how perfectly and how speedily children will rally from formidable diseases, even when they have been brought to the very verge of the grave. I need scarcely remark, that the patient often suffers materially from the too confident unfavourable predictions of the physician. The hopes of the attendants are at once extinguished, and they have no longer energy to continue their active services. Those means, therefore, which might possibly afford some chance of relief are too commonly disregarded and unemployed. I am perfectly aware, however, that it is often a very difficult and a very delicate matter to awaken in the minds of friends and attendants a sufficient apprehension of danger, without extinguishing their hopes, and inducing the inactivity of despair. The second practical lesson to be deduced from the foregoing case is, that we may generally order more medicine to be given than we expect the patient to take. In the present instance, we find that at nine o'clock on Sunday morning five grains of calomel were ordered to be given every hour, until vomiting or purging was induced; yet, at seven o'clock in the evening, ten hours afterwards, although neither of those effects had been produced, only four powders had been taken. Every medical practitioner must frequently be annoyed by similar instances of gross neglect. But I pass on briefly to notice the discussion which followed the recital of the foregoing case. Now, this discussion very naturally divided itself into two parts—first, with respect to the pathology of the disease, and secondly, with regard to its treatment. Under the first division, one party maintained that croup is essentially an inflammatory affection, whilst another contended that it is of a mixed character, being partly inflammatory, and partly spasmodic. The latter view was also taken by a gentleman from whom Sir Arnold Knight read a communication. The writer contended that all the dangerous symptoms of croup arise from spasm, and suggested that the wisest plan of treating the disease is to relieve the spasm, and leave nature to cure the inflammation. He stated, that for a period of twelve years he had been accustomed, in all cases, to give a mixture of squill, opium, and valerian, and that during this period only one case, out of a great number, had proved fatal. That some cases of croup are complicated with spasm, no one can hesitate to admit; but that the efficient cause of the disease, in the vast majority of cases, is inflammation of the lining membrane of the larynx, frequently extending along the trachea, and even into the smaller divisions of the bronchial tubes, may fearlessly and confidently be maintained. On the second division of the discussion there was not much difference of opinion. All seemed to agree that in the early stages of the disease antiphlogistic remedies are chiefly to be relied upon. The abstraction of blood is not only a valuable means of lessening inflammatory excitement, but also of overcoming spasmodic action; so that whether croup is to be regarded as a spasmodic, an inflammatory, or a mixed disease, the abstraction of blood may be advantageously prescribed. In the treatment of inflammatory affections, mercury will stand second in importance only to venesection. In the case under consideration, the time was past when bleeding could have been resorted to with advantage; and, therefore, the former remedy was, perhaps, the more vigorously administered. Five grains of calomel every hour must certainly be regarded as a large quantity for a child only four years of age. But we must remember that children generally bear mercury better than adults. In the course of the discussion it was stated that the late Mr. Shaw, who was for many years an honourable, intelligent,

and successful practitioner at Attercliffe, was in the habit of prescribing calomel in cases of croup in the same doses, and at the same intervals, as it had been employed in the case under consideration. The signal for discontinuing the medicine was the supervention of vomiting or purging. The value of this treatment was further corroborated by Dr. Shearman, who stated that the gentleman with whom he was for some time an assistant at Saddleworth, in the West Riding of this county, adopted a similar plan with almost unvaried success; the medicine was rarely needed after the sixth dose—that is, after half a drachm of calomel had been given in the course of six hours. Dr. Shearman further stated, however, that although at one time he adopted a similar line of treatment, he had subsequently felt obliged to discontinue it. In some stages of croup emetics are also useful, since they occasionally enable the little patients to void portions of the false membrane which is almost invariably formed. This was the case in the instance under consideration. But there was one point in the treatment of the disease which gave rise to considerable difference of opinion, and that was respecting the employment of the warm bath. One gentleman of considerable practical experience declared that the warm bath had invariably done harm in every case of croup in which he had seen it employed, and this was, to some extent, corroborated by another gentleman, who remarked that he had seen some cases in which its employment had been immediately followed by death. On the other hand, several gentlemen spoke in decidedly favourable terms of the warm bath as a remedy in croup; they had employed it extensively in their own practice, especially during the earlier stages of the disease, with the most marked and decided advantage. The immediate object in the employment of the warm bath, I need scarcely remark, is to occasion a determination to the skin; and, therefore, I am perhaps justified in saying that the testimony and arguments of the advocates in its favour receive some confirmation from the statement which was subsequently made by Mr. Ray, who remarked that he had seen cases of severe croup in which the characteristic features of that disease immediately vanished on the appearance of the eruption in exanthematous fevers. In the course of the evening it was further stated by Mr. Turton that he had recently had a case of croup under his care in which to the patient, a child between three and four years of age, being in too low a state to warrant the employment of either bleeding or antimony, he had given the *tinct. lobel. infl.*, in doses of five minims every hour, with the happiest effect.

It is not needful that I should dwell longer on the proceedings of the first night of meeting; I pass on, therefore, to notice the second disease of an inflammatory nature which was brought under our consideration. This was a case of pleuro-pneumonia, introduced by Dr. Harwood. The subject of the Doctor's remarks was a boy, aged twelve, who had been ill four days when he was first visited. It is not needful that I should recapitulate the symptoms, nor yet that I should dwell upon the treatment, since neither the one nor the other presented any remarkable feature of interest. The patient died, and an account of the post-mortem examination was detailed by Dr. Harwood. One interesting fact, however, in this case must not be passed over without observation. I allude to the circumstance of each kidney presenting a beautiful specimen of granular degeneration. The little patient had scarcely ever enjoyed a good state of health; he had been a delicate and ailing child, but had never any long-continued anasarca. A short time before the attack of illness of which he died, the inferior extremities were œdematous, but this continued for only a few days, and never reappeared, and there was not at any time infiltration into the cellular tissue of the rest of the body. There was, therefore, an absence of the symptoms by which what is called Bright's disease, or albuminaria, is usually characterised; but yet there was perfect granular degeneration. It is a matter of regret that the specific gravity and albuminous nature of the urine were never tested. We should naturally expect that whilst coagulation would have been abundantly manifest, the specific gravity of the urine would have been less than natural. That granular degeneration of the kidney is not necessarily attended with anasarca, is now abundantly proved. In illustration of the truth of this observation, I need only refer to the case under consideration, and to several others which have been published by Dr. Bright in "Guy's Hospital Reports." For my own part, I am disposed to think that too little attention has heretofore been paid to the condition of the urine, and I would venture to suggest an accurate examination of it in many complicated and tedious cases, unattended with dropsical symptoms, which do not yield to the usual remedies.

Class II. — *Abnormal Cerebral Circulation.* — Under this general division I shall notice four separate communications; the two first which claim our attention were on the subject of delirium tremens; I shall, in the first place, very briefly notice that which was brought before us by Mr. Turton, who dwelt chiefly on the symptomatology and pathology of the disease. He alluded to the two species pointed out by Dr. Blake as depending upon the direct, or the indirect, influence of intoxicating liquors. The three separate stages of the disease, on which Dr. Blake and some other writers insist, were also pointed out; and it was contended that, although there is considerable disturbance of the cerebral circulation, there is not any amount of inflammatory action usually present. The morbid appearances within the skull which have been most commonly observed are, slight opacity of the arachnoid and injection of the pia mater. But it is probable that these changes ought rather to be regarded as the consequence, than the cause, of the peculiar cerebral excitement by which the disease is characterised. There can be but little doubt, however, that delirium tremens is occasionally complicated with meningeal inflammation, and requires the adoption of antiphlogistic remedies. The efficient or procuring cause of the disease, it need scarcely be remarked, is the long continued abuse of stimulating drinks—ardent spirits, wine, or ale. Sometimes the symptoms come on shortly after the withdrawal of the stimulus, and occasionally they seize their unhappy victim during the full tide of his intemperance. The general health first becomes deranged; dyspepsia is induced; a train of nervous symptoms sets in; and, in a short time, delirium tremens becomes fully established. Such

were the general topics to which Mr. Turton directed the attention of his auditors.

In the communication which was read at a much earlier period of the session by Mr. Thomas, the method of treatment to be adopted in the same disease was chiefly dwelt upon. Mr. Thomas related a case which had occurred in his own practice, in which he commenced by giving two grains of opium, and afterwards repeated one grain every three hours. On the following morning the patient took sixty drops of the tincture of opium, and a progressively increasing dose was given every three quarters of an hour, till in the evening it amounted to one hundred minims. The disease yielded in three days and a half, during which period the patient took eighteen grains of opium, and five ounces and a half of the tincture. In about a year afterwards the patient suffered from another attack, which continued four days and a half. The total quantity of opium taken during the latter attack was four scruples and eight grains of the powder, and twenty-seven ounces and a half of the tincture. The largest dose given at one time was three drachms of the tincture. In the subsequent conversation to which the recital of these cases gave rise, it was generally agreed that the exhibition of full doses of opium at short intervals is the most judicious and successful practice; but of course, when the disease is complicated with other affections, the treatment must necessarily be modified. The opium treatment, however, even in simple cases, is not commended by all writers. Dr. Ware, of Boston, in North America, for example, has published an analytical table of cases in which various methods of treatment were adopted. In eight of his recorded cases treated by large doses of opium, four died; in seven treated with small doses, only two died. "It appears," says he, "that of fifteen cases in which opium constituted the principal remedy, six died; whilst of fifty-four cases in which opium was not used at all, or only incidentally in small doses, only five died." Other narcotic medicines besides opium are occasionally employed with advantage in cases of delirium tremens. Thus, in the course of the evening, a case was related in which opium and morphia seemed to produce no effect, whilst free doses of tincture of hyoscyamus were productive of decided benefit; and it was further stated by our late associate, Dr. Bartolomé, that a friend of his had very successfully employed lactucarium after opium had entirely failed. This latter remedy, it will probably be recollected, was at one time very extensively employed in a great variety of cases by the late Dr. Duncan, sen., of Edinburgh; but the extreme nicety which is required in its preparation at all times renders it a very uncertain medicine.

(*To be concluded in the next Number.*)

ENLARGED CLITORIS.

Clitoris enormously enlarged, successfully removed by Mr. Auchinleck; the tumour weighs five pounds, and occupied a period of only eighteen months in attaining this vast size; its attachment was narrow and contracted, so that but little difficulty was experienced in performing the operation. Its structure is dense and fibro-cartilaginous, like that of the other specimens; the surface is hard, warty, and lobulated. —*Houston's Catalogue.*

THREE CASES
OF
EMPYEMA, OR PLEURAL ABSCESS.

By W. S. Oke, M.D.,

Physician to the South Hants Infirmary.

[*For the Provincial Medical Journal.*]

Case I.—I was requested to visit a lad, the son of a labourer, aged thirteen, suffering with acute pain of the left side, cough, dyspnœa, and fever. His illness had been of short duration, and was supposed to have arisen from cold.

On examining the thorax I found a swelling a little below, and posterior to, the left nipple. The swelling was fluctuating and without pulsation, and indicated the presence of pus in large quantity; nothing, in short, could be more easy than the diagnosis in this case.

A free incision was immediately made, and a torrent of healthy pus poured from the wound. The quantity measured ninety-six ounces, and must have filled the whole of the left thoracic cavity. The lad was greatly relieved by the evacuation, and in a few weeks he completely recovered.

Case II.—Thomas Peters, aged 40, was admitted into the South Hants Infirmary on the 26th of April, 1841. He had been steward in a steam-packet, and very intemperate in his habits of drinking. The history of his disease was somewhat obscure. It appeared that, from exposure to sudden changes of temperature, to which his situation was liable, he caught cold, which fell upon the respiratory functions. On his admission, I found him suffering from pain and weight of the left side of the thorax, cough, slight expectoration, and difficulty of breathing, which was much aggravated by any exertion; his tongue was not much furred, and his pulse ranged from about 85 to 100 in a minute.

On exploring the external surface of the chest, the result was as follows:—

There did not appear to be any difference as to size in either side of the thorax; nor could any material difference be proved by a transverse measurement. The left side of the thorax was found to be everywhere completely dull on percussion; the intercostal spaces were dilated; the ribs motionless; and the intercostal muscles taking no part in the respiratory action. On the right side, the sound by percussion was normal, and the intercostal muscles and ribs in hyper-respiratory action.

On applying the stethoscope to different parts of the left side no respiratory sound whatever could be detected, and the heart's action was heard at a distance. On the right side the respiration was distinctly puerile, and the action of the heart was found well developed on the right side of the sternum.

These circumstances led to the diagnosis that there was pleural abscess in the left thoracic cavity, compressing and interrupting the action of the left lung, and displacing the heart *a situ naturali* towards the right side of the thorax.

As the general health was not much disturbed, and there being no *urgent dyspnœa*, it was decided that there was no immediate necessity for the paracentesis, and that an attempt should be made to cause absorption of the fluid by a general mercurial treatment,

accompanied by a light nutritious diet. The following medicine was accordingly prescribed, and commenced at once :—

Calomel, six grains ;
Opium, four grains ;
Conserve of roses, enough to make twelve pills.
One, thrice a-day.

Slight ptyalism was produced. In about a fortnight the cough and dyspnœa were decidedly diminished, and he expressed himself as considerably relieved. From this time he gradually improved. The sound of the left side of the thorax by percussion became more and more clear; the ingress of air into the respiratory tubes was audible; and at the end of five weeks he was discharged convalescent.

Thomas Peters returned to Southampton in March last. He called at the infirmary, and reported himself completely recovered.

Case III.—Robert Gee, aged 33, steward of a steam-vessel, dark hair, pale complexion, and considerably atrophied, was admitted into the South Hants Infirmary on the 8th of March, in the present year.

The following is the history of his case :—

He has been affected with cough since February, 1841, which originated with symptoms of common nasal and bronchial catarrh. As the attack was not severe he thought nothing of it, and continued his duties on board the vessel. The cough, however, did not leave him ; and after about four months he began to feel pain of the left side, the muscles of which became stiff, and interrupted the free use of his left arm. These symptoms went on more or less till October, when the pain of the side increased to such a degree, that he felt as if knives were piercing him ; at the same time the cough also increased, associated with dyspnœa and muco-purulent expectoration.

When I visited him on the 14th of December, these symptoms had considerably subsided. There remained a troublesome cough, with scanty expectoration, and a sense of weight of the left side, on which alone he could lie with any degree of comfort. There was some degree of attenuation ; the pulse ranged from 90 to 100 in a minute; the tongue was clean, and his general health not much disturbed. On exploring the thorax, the left side was dull by percussion, and but very limited respiration could be detected by auscultation, and that over the upper lobe ; on the right side, the percussive sounds were clear and loud, and the respiration was puerile.

As he had been the subject of cough so long, and was one of a consumptive family, I supposed the case might consist of disorganisation of the left lung, and, therefore, did not expect that it could admit of any essential service being done ; however, I placed him under a mercurial course in the following formula :—

Calomel, one grain ;
Extract of conium, three grains. A pill, thrice a-day.

By this means he was smartly ptyalised for several weeks ; but he did not appear to be benefitted by the treatment, either locally or generally ; on the contrary, at the expiration of two months he had lost flesh ; his breathing had become more laborious ; the left side was everywhere dull ; its external aspect was enlarged, measuring transversely an inch more than the right ; the intercostal spaces were dilated, and without muscular action ; no respiratory sound could be detected at any part of the left side ; and the heart was pushed to the right side of the sternum. Along with these symptoms, there was serous infiltration into the sub-cutaneous tissue over the inferior part of the left side of the thorax and into the peritoneal cavity ; there was also anasarca in a slight degree of both inferior extremities. What is somewhat remarkable, the cough and expectoration had almost subsided.

This state of things, clearly indicating to my mind a large pleural abscess in the left thoracic cavity, I suggested to him the evacuation of the fluid by an external incision as a *derniere ressource*, and as a possible means of relief. "*Anceps remedium melius est quam nullum.*"

A consultation was held ; the diagnosis confirmed ; and in a few days he came into the infirmary for the operation.

On the 9th of March, the day after his admission, a grooved exploration-needle having discovered the presence of pus, a free incision was made by a scalpel through the sixth intercostal space into the chest, midway between the ensiform cartilage and the tenth dorsal vertebra. A mass of coagulated albumen plugged up the aperture ; but as soon as this was removed, ninety ounces, or five pints, of laudable pus were evacuated.

He bore the operation well, and was greatly relieved by it. For some days the same albuminous mass continued to impede the discharge, which somewhat oppressed his breathing ; a free and regular outlet was, therefore, subsequently maintained by the frequent use of a director.

The next symptom that presented itself to my notice was the metallic tinkling, accompanied by occasional and forcible expulsions of air through the external aperture. The tinkling was heard through the stethoscope, at any part of the left side of the chest, either after speaking or coughing. It sometimes closely imitated the striking of a wire against an empty glass vessel ; at others, the falling of a drop into a thin fluid. Whilst auscultating the actions of the respiratory function a few days ago, I could distinctly hear the air rushing through the pleura pulmonalis into the thoracic cavity ; and the sound exactly imitated the blowing of air by the mouth into a large bladder.

The fluid at present discharged from the external orifice is partly serous and partly muco-purulent, the latter kind sticking to the vessel, as in catarrhus vesicæ.

The cough and expectoration returned after the evacuation of the abscess, and have continued more or less to this time ; the urine is high-coloured and scanty ; there still remains some serous fluid in the cavity of the belly, and the legs are slightly anasarcous above the ancles.

On the other hand, the breathing continues much relieved ; there is no hectic development ; the pulse ranges from 90 to 100 in a minute ; his nights are tranquil, and he can sleep on his back ; his appetite is good ; he has gained flesh, and can walk to a considerable distance without fatigue.

The percussive sounds are much clearer, and limited respiration can be detected in both lobes of the left

lung; the heart and ribs have resumed their normal position; the intercostal muscles are in perceptible action, and the metallic tinkling is seldom heard.

Such is the history of this case. The result we have yet to learn.

REMARKS.

It is somewhat singular that these three cases should have occurred in the left pleural cavity. Whether the left side of the thorax is more frequently affected with this disease than the right, my own experience is too limited to determine.

The first case is so plain a matter of fact as to require no observation, except that pleural abscess in young and healthy constitutions will, under proper treatment, justify a favourable prognosis.

That the second case consisted of purulent effusion there can be no reasonable doubt.

Had it been serous it would have been complicated with some disorganisation of the lung, which would have led to a detection of its true character. There would have been probably no dilatation of the intercostal spaces, and no displacement of the heart.

I do not mean to assert that the thorax is never dilated by serous fluid. As Laennec writes—doubtless it sometimes is so; but I feel convinced that such a result is very uncommon; that it is the exception, and not the rule. But why is it that accumulation of serum in the thoracic cavities does not more commonly produce abnormal enlargement? Because serous fluid is the effect of infiltration, which is passive, and inferior to the resistance of the thoracic parietes; whilst pus is the direct effect of arterial secretion, which is active, and superior to their resistance.

Thoracic enlargement, dilatation of the intercostal spaces, and displacement of the heart, associated with symptoms of fluid in the side affected, must, therefore, be considered in the great majority of cases as indicative of the presence of pus.

The case of Robert Gee is, in every point of view, most interesting; whether we consider the state of atrophy and dyspnœa to which he was reduced; the complete marks of diagnosis; the relief afforded by the operation; or the auricular symptoms which occurred after the evacuation of the abscess.

The term "metallic tinkling" does not, to my mind, comprehend all that is signified. It is exactly descriptive of one sound, but not of another, which, by way of distinction, ought to be called "the dropping sound," or "the drop-tinkling," so distinctly heard in this case.

I think some term ought also to be given to the sound produced by the rushing of air from the lung into the pleural cavity, as above described—and this I would denominate "the pulmono-pleural inflation."

Whether I am the first to give a name to this auricular symptom I cannot determine.

From the great relief experienced by the operation, I was disposed to think there was no important disease of the lung; but from the sign just mentioned—proving a communication between the lung and the pleural cavity—such an opinion is not tenable; and this fact, associated with a hydropic condition of the peritoneum, still renders the termination of this case extremely doubtful, and forbids a favourable prognosis.

Southampton, June 2, 1842.

ON

DISLOCATION OF THE KNEE-JOINT.

By Jonathan Toogood, Esq.,

Senior Surgeon to the Bridgwater Infirmary.

Complete dislocation of the knee-joint is so very rare an accident, that I believe few surgeons have ever seen it. I furnished Sir Astley Cooper with the following case, which he published in his work on Dislocations. He had never met with a similar one, nor has any surgeon of my acquaintance connected with the London or provincial hospitals, although I have related it to a considerable number; neither do I remember to have read of such a case. I learnt also, in a conversation with Dupuytren and Roux, that it had not occurred in their practice.

Dec. 5, 1806. Francis Newton, a strong, athletic man, thirty years old, fell from the fore part of a waggon heavily laden with coals, and, entangling his foot in the framework of the shaft, was dragged a very great distance before he was released. I saw him two hours after the accident; the left knee was very much swollen; the tibia, fibula, and patella were driven up in front of the thigh, and the os femoris occupied the upper part of the calf of the leg, the internal condyle being nearly through the skin. It was a complete dislocation, and the appearance of the limb was so dreadful that I despaired of being able to reduce it; but to my surprise it was more readily effected than I imagined. By placing two men at the thigh whilst I extended the leg, the reduction was immediately effected. The whole limb was placed in splints, and the strictest antiphlogistic treatment observed, with the most perfect quiet. The symptoms were very mild, and, by carefully watching him, he suffered very little inflammation or pain. At the expiration of a month I allowed him to get up, and on the 29th of January he came into this town, a distance of four miles, in a cart, and walked from an inn to my house, with his leg but little swollen, and having some motion of the joint. He eventually recovered very good use of his limb, and walks with so little inconvenience, that he has followed his business as a waggoner ever since, and this day (November 30, 1822) I have seen him walking by the side of his team with very little lameness.

I am induced to send you this case, which occurred many years ago, in consequence of having read in your last number a short account of one of a similar nature by Mr. Coote. In his case, I should imagine, from the speedy recovery of the patient, the dislocation was not so complete as in that above related; but, as such cases are so very uncommon, I hope he will publish the details. The successful issue of both cases clearly proves his position, "that in dislocations of the tibia forwards, or of the femur backwards, the injury to the ligaments and other soft parts about the knee-joint is not necessarily such as to render the recovery of the limb in a perfectly useful state a forlorn hope, as has been represented by writers of high authority, some of whom have almost regarded amputation as *primâ facie* necessary to save the life of the patient."

Bridgwater, May, 1842.

PARTIAL DISLOCATION OF KNEE-JOINT.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you think the subjoined case of sufficient interest, perhaps you will have the kindness to insert it in your valuable Journal.

I am, Gentlemen,
Yours obediently,
J. BALLARD PITT, Surgeon.

Mattishall, Norfolk, June 7, 1842.

A young lady, on the 2nd of February, produced partial lateral dislocation of the right knee-joint, by falling down stairs with great violence; she was immediately carried to her bed-room, and laid upon a mattrass. On examination I found the internal condyle of the femur projecting considerably inwards, and the external tuberosity of the tibia outwards; she shrieked violently, and complained of severe pain, similar to cramp, down the outer side of the leg. Having placed the patient on her back, I made gradual extension and counter-extension, which, together, soon brought the joint into its former position; lateral splints were then put on, and bandaged in such a manner, as to allow leeches and lotions to be applied. The following draught was taken at bed-time:—

Tincture of hyosciamus, half a drachm;
Water, ten drachms;
Syrup of roses, one drachm.

Feb. 3. Passed a restless night; considerable swelling of the joint, with much pain and tenderness, particularly along the course of the internal lateral ligament. Eighteen leeches to be applied, and evaporating lotions, and to take the following draught:—

Sulphate of magnesia, six drachms;
Carbonate of magnesia, half a drachm;
Infusion of senna, one ounce and a half;
Tincture of senna, one drachm.

4. Bowels relieved; did not sleep much; swelling increased. Twenty leeches to be applied, and lotion continued.

5. Complains of pain, extending up the thigh; bandages loosened; great heat of the joint; swelling and tenderness the same; and a sensation of effusion upon pressing down the patella. Twelve leeches applied, and to take the following pill and draught:—

Opium, one grain;
Calomel, three grains.

An aperient draught in the morning.

6. Symptoms nearly the same, with numbness of the leg and foot.

7. More pain felt on the outer side of the joint. Leeches and lotions continued.

8. Swelling and heat a little diminished, but complains of a sharp pain near the inner margin of the patella.

9. Pain the same. Leeches and lotions continued, and to take an aperient draught the following morning.

From the 9th till the 15th nothing particular occurred; swelling and pain decreased; and on the 16th I removed the splints, fomented the joint, and made a little passive motion, which caused severe pain on its inner side, and a sensation of stiffness over the centre.

17. Passive motion repeated.

19. Placed the leg over a double inclined plane for a short time. From this date perfect rest was allowed till the 25th, when a little flexion was again tried, and borne with much less suffering. After this period, a little linim. saponis co. was rubbed in daily, and she was put to sit upon the edge of a table, and made to bend and extend the limb several times, which gradually gained strength and freedom of motion. She now protects the joint with an elastic knee piece, and is able to walk comfortably.

REMARKS.

Having treated this uncommon kind of dislocation, I was anxious to publish the details, in order to impress upon the minds of those medical gentlemen who have not seen a similar case, the importance of early and continued application of leeches and lotions, which I consider to be the only safe and effectual means of keeping down the inflammatory symptoms resulting from such a formidable luxation. What ligaments were injured, I cannot exactly tell; but I think the internal lateral, and probably the posterior crucial, suffered in some degree, the cartilages and synovial membrane being of course very much disturbed; the numbness complained of down the leg, particularly on the outer side, must have arisen from some particular pressure or disorder of the peroneal nerve, which I attributed to the biceps tendon. A few days previous to this accident, I reduced a dislocation of the humerus into the axilla, soon after it occurred, with very little trouble; no bad symptoms followed, and the patient soon got well. I merely mention this case, as it afforded me a good opportunity of observing the different symptoms connected with luxations of ginglymoid and ball and socket joints.

SUCCESSFUL APPLICATION OF THE STYPTIC MATICO.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I cannot resist the opportunity kindly afforded me, and cheerfully granted, by my correspondent Dr. Monro, one of the surgeons of the Dundee Infirmary, of bearing testimony to the good effects of the South American styptic "*maticò*," which I distributed among the members of the association at our anniversary meeting last year at York; I therefore send you a copy of his letter to me upon the subject, and you will much oblige me by giving it a place in your periodical.

Yours faithfully,
THOMAS JEFFREYS.

Liverpool, June 9, 1842.

From Dr. Monro, Dundee, to Dr. Jeffreys, Liverpool.

"Dundee, May 28, 1842.

Dear Sir,—I was favoured with your communication containing the "maticò" some time ago; I find you are naturally desirous of knowing the result of it in my hands. The circumstance of its being my year to officiate, as attending surgeon to our infirmary, has

given me opportunities of using it more than ordinary in surgical cases. I have not administered it internally, but from what you state I shall certainly take the earliest opportunity of giving it a trial.

It has been very often used after the application of leeches, where there was difficulty of stopping the oozing of blood, and uniformly with the most decided success. One of these cases was that of our house-surgeon, who had fever, and being a young, stout, and florid person, with early symptoms of head affection, leeches were ordered, which, by his own desire, were applied inside of both nostrils; the bites bled profusely, and there was a difficulty in stopping the bleeding. Cold applications to the head, and plugging the nostrils, &c., were tried without effect, when the "maticò," in leaf, was applied over the bites, and pressed on with the point of the finger; the remedy proved immediately successful. This is, in my opinion, a good and decided case, happening in the person of an intelligent and experienced medical man. He describes the feeling produced by the leaf to be, one of increased heat and throbbing, which continued for about five minutes, when all unpleasant sensation went off; others to whom it was applied described their feelings as very similar to those just mentioned. The maticò was also applied to a man brought into this hospital with a wound of the right temple; a considerable branch of the temporal artery had been divided; the wound was dressed, and a compress and bandage applied, but still the blood burst out; cold water was several times had recourse to, still the bleeding returned after a while; at last the maticò was used; at first I stuffed the wound with the powder, but found it not to answer so well as the leaf, being soon washed away from the wound in the vessel; I then pressed in several pieces of the leaves, holding them firmly for some time with the point of the finger; the result was, that we had no more hæmorrhage. We had a somewhat similar case of a man with a wound of a branch of the palmar artery, which resisted graduated compression and bandages, and in which the maticò was used with the best success.

From these cases I cannot doubt but that the maticò has most decided styptic qualities, and that it may become a very valuable addition to our materia medica. It will afford me pleasure if I can give you any farther testimony of the effects of this substance, in which you seem to feel a peculiar interest; I shall persevere in trying it in cases where I think it appropriate, whether medical or surgical.

Mr. Crichton, my successor for the following year in the infirmary, has promised to follow up the experiments with the maticò, and the house surgeon takes an interest in the matter, so that I hope to give you further proof of its good effects as a styptic.

I am, dear Sir,

Yours faithfully,

Wm. Monro."

P.S. I avail myself of this opportunity of recording that my friend, Dr. Kendrick, of Warrington, informed me that he had occasion to apply it to a divided artery in a gentleman who cut his throat, and that it instantly stayed the effusion of blood, which was taking place with considerable violence.

T. J.

ON THE

RADICAL CURE OF HERNIA;

THE SUBSTANCE OF A PAPER READ BEFORE THE HARVEIAN SOCIETY.

By P. BENNETT LUCAS, Esq.,

Senior Surgeon to the Metropolitan Free Hospital, and Lecturer on Anatomy and Physiology at the Westminster Hospital School of Medicine.

The possibility of a radical cure of hernia is admitted by all authors who have written upon this disease, and is acquiesced in by all reflecting and practical surgeons.

Universal as this assent is, it is no less true that out of the immense number of patients afflicted with hernia, who are daily to be met with at our public hospitals, or who present themselves to us in private practice, but a small number holds out to the surgeon a reasonable hope of a perfect recovery by any method of treatment he may adopt.

It has been ascertained, by statistical reports, that about one-sixteenth of the human race is afflicted with hernia. This fact has been arrived at from the reports of the London Truss Society, and from similar institutions; and it is much to be regretted that a more lengthened detail of the cases has not been furnished. It is only by a fair, unprejudiced view of a large number of cases, each individually described—the history of each given—the cause or causes which predisposed to the disease, and which also excited it—the length of time the hernia existed before the patient applied for relief—the condition of the abdominal parieties and their contents—added to the usual inquiries of the age, the sex, and the occupation of the patient—the kind of hernia, and its facility of reduction—it is only by such essential considerations as these that we can select one case from another, with a view to effect its radical cure.

Some years since I was introduced to a medical gentleman, who arrived in this country from America, furnished with numerous testimonials from Professor Pattison and others, in support of his pretensions to cure hernia by the application of trusses. I witnessed some cases in which he certainly succeeded, and others which received no benefit from the means he employed. I was, however, so fully satisfied of the utility of his plan of proceeding, and that it was founded upon correct views of the animal economy, that I did not hesitate to apply a similar method of treatment to two cases of oblique inguinal hernia.

The subjects of both these cases were young men, one aged twenty-six years, the other thirty years. In the elder of the two the treatment failed, but was productive of no bad consequences. The case of the younger forms the subject of this paper.

Mr. A. B., aged twenty-six years, was vaulting into his saddle, when he felt a slight and sudden pain in his right groin, which extended down the outer side of his leg, and was accompanied with the sensation of something having given way. These feelings subsided in a few minutes, and he continued his ride as usual. On his return home he observed a small tumour in his groin, which he considered of so little moment that he continued his daily avocations for a month, and these were the contrary of inactive, before he applied to me.

When he was made acquainted with the nature of his disorder, he suffered great mental anxiety from the apparent hopelessness of his ever being cured; and being a young man of some property, and an attractive person, and unmarried, he felt the necessity of wearing a truss, with as uneasy a mind as he did the danger which hourly attended his not doing so. At this time the tumour, which was a well-marked oblique inguinal hernia, protruded at the external or anterior abdominal aperture for more than an inch, and was reduced with the utmost facility. It was an enterocele.

A truss of ordinary construction was applied in the usual manner, and at the end of a year the hernia was still present, protruding as usual when the truss was removed, and when the patient made any respiratory effort.

In this condition of affairs, it was proposed to endeavour to effect, by pressure, a consolidation of the tissues in the immediate vicinity of the posterior inguinal aperture, and thus to present a barrier to the protrusion of intestine. To the accomplishing of this end a truss was applied, which presented these peculiarities:—Its spring was powerfully strong, and its pad, or rather, what corresponded to this piece of the ordinary instrument, was made of box-wood, and was conical, but blunted at its apex. The hernia was reduced; a silk handkerchief, folded three or four turns, was applied over the posterior abdominal aperture, and, with the handkerchief intervening, the truss was applied, its wedge being accurately fitted to the opening.

The curve of the truss did not consist of a single solid arc of steel, but of several plates of this metal, so that the amount of pressure could be regulated according to the feelings of the patient, by the removal of one or more of these springs.

This instrument the patient wore day and night for two months. At first he experienced some inconvenience from the firm pressure against the abdominal wall, and two of the steel curves were removed; after wearing the instrument in this degree of force for a few days, the removed arcs of steel were replaced, and at the end of six weeks the hernia ceased to descend.

A truss of ordinary construction, exerting little pressure, but rather support, and with a soft, flattened pad, was worn by the patient for some months. I hear occasionally from him; he tells me that he has left off his truss for more than a year, is married, and remains free from the disease.

The exciting cause of the hernia in this patient I have already mentioned; that which predisposed to it is, perhaps, more interesting. The patient had typhus fever, and recovered, after a long and tedious confinement, greatly emaciated. As so frequently occurs after recovery from prolonged functional disturbance, he rapidly increased in bulk, and continued for some months in a most unusual state of obesity. In this condition he used more than ordinary exercise, and was gradually approaching his healthy standard when the hernia made its appearance, from the exertion I have mentioned.

I shall not trouble the society with the narration of other cases. I have notes of five others in which I have adopted a similar proceeding. In two of these I have every confidence of a similar happy result. They are cases of single oblique inguinal hernia, confined to the right side in each. There is still an impulse given at the posterior abdominal aperture, but no protrusion.

In one case I succeeded in blocking up the posterior abdominal aperture; but, unfortunately, a direct intestinal hernia made its appearance on the same side, the result, I have no hesitation in stating, of the closure of the opening in the transversalis fascia.

Mr. Guthrie and myself saw this patient together two years ago. At first we thought that the two rings had approached each other, and those changes in the abdominal apertures and inguinal canal had taken place, which are known to occur in old oblique herniæ. That this was not the case, however, was satisfactorily ascertained by the following manipulation:—I inserted my index finger along the spermatic chord to the posterior abdominal ring, and there its further progress was firmly impeded; by then altering the oblique position of my hand, I made direct pressure against the posterior ring, so as to prevent the possibility of a descent; and upon now making the patient cough, the hernia descended between my hand and the pubes, directly through the anterior ring.

To most of my hearers it may not appear to be a very novel proposal to cure herniæ by the application of trusses. But I believe none will deny that these instruments have been directed to the palliation of symptoms, and security against strangulation, rather than to the accomplishing of a permanent cure.

Whatever opinion may be entertained of the merits or demerits of thus dealing with herniæ, it cannot be too forcibly insisted upon that the circumstances attending very many cases of the disease prohibit the surgeon from attempting a radical cure. Where the predisposing causes to the affection are still in operation, it would be idle to attempt it, without previously attempting their removal. Herniæ of long standing offer many serious impediments to the adoption of the measure proposed; and in the old subject the reparative powers are so feeble that little in this case can be expected. In the young subject, and more especially where the hernia was occasioned by a violent exertion, I should expect the happiest results.

There is another question of some moment which is involved in the consideration of the cure of herniæ, and this relates to the insurance of lives.

In an interview I had, a few months ago, with the surgeon of an extensive life assurance company, the question of the cure of hernia was stated; and this gentleman said, that under no circumstances would the company insure the life of a patient who had *at any time* been the subject of hernia.

SMALL HOSPITALS.

There are only fifteen beds in the hospital at Goettingen, and I do not wish for more. I do not think that the experienced practitioner is formed by the number of patients. Experience is the result not of *seeing* merely, but of *reflecting*. It is not *eating*, but *digestion*, that gives strength. — *Richter's Medical Observations.*—I. D. J.

CASE OF CATALEPSY,

WITH

TRANSPOSITION OF THE SENSES.

By Dr. DUVARD, Caen.*

Mademoiselle Melanie had enjoyed good health up to the age of twenty-one, when she began to suffer from dry cough, with pain in the chest and headache; in January, 1841, she was attacked by pleurisy of the right side, and since then has continued to suffer from pain in that region; the catamenia now decreased in quantity and were finally arrested.

In the month of July, 1841, I was first called on to visit the patient; she then exhibited all the signs of pleuritic effusion. After a variety of treatment, continued for several weeks, a seton was inserted in the patient's side, and she was compelled to have an enema—a remedy which she had previously refused to submit to. A few hours after the administration of the enema, she was seized with a most violent attack of hysteria, which continued for several hours. The attacks of hysteria recurred, with the same violence, for several successive days, and seemed to be excited by the ingestion of food, which the patient continued to eat with avidity, in spite of remonstrances.

Six days after the first attack of hysteria, the patient became suddenly dumb, and continued so for three days, being unable to articulate a single word; on the 4th day she recovered the power of speech, at the termination of a severe hysterical attack; the surprise, however, expressed by those about her at hearing her speak, threw her into a fresh fit, which lasted for three hours, and ended in catalepsy: this was on the 30th of August, 1841. From this period the patient was seized every day with several attacks of catalepsy, alternating with hysteria, and lasting about half an hour.

During the cataleptic accesses there was complete insensibility of every part of the body; the limbs remained in the most fatiguing positions without stirring; the respiratory movements were imperceptible, and the pulsations of the heart, which could scarcely be felt, were from 60 to 70 in the minute. After a few days the cataleptic fits became longer, and lasted for several hours, being, however, occasionally interrupted for a minute or two, whenever the girl coughed. Sometimes she would turn round in her bed or sit up; at others, she would suddenly start up, without opening the eyes, and place herself on the edge of the bed, or on some piece of furniture, in a most fatiguing posture; in this state would she remain until a fit of coughing came on, or until she was brought back to her bed. Although the eyes were constantly shut, she avoided every obstacle carefully, and seemed heedless of risks which would have alarmed any one in a normal state. On one occasion, she left her bed during a fit of coughing, ran to a window and opened it; before any one could come to her assistance, she had one foot out of the window, but the cough suddenly ceased, she became cataleptic, and remained in the same position until some people came and placed her in bed.

When the fits of hysteria and catalepsy ceased, the patient recovered all her faculties, and merely complained of fatigue, and her ordinary pain in the side.

Five weeks after the first attack of catalepsy, Mdlle. Melanie fell several times into a state of natural somnambulism. She would get up without opening her eyes, walk about her room, arrange the furniture, and enter into conversation with those about her, often mentioning circumstances which she would have wished to conceal; after remaining in this state for several hours, she fell into a state of catalepsy, indicated by apparent suspension of the respiration and complete silence.

On the 12th of October, a few days after her first access of somnambulism, I found the patient in a state of catalepsy. Having placed my hand on the epigastric region, I noticed that her countenance became expressive of pain. I then placed my lips on the pit of her stomach, and asked her several questions; to my infinite astonishment she answered correctly, for although I had read most of the histories of this kind, recorded in different works, I did not believe one of them. During this first examination I made numerous experiments, which led me to conclude that there was a transposition of the five senses to the pit of the stomach. On the evening of this day I made fresh experiments, during three hours, in the presence of numerous witnesses, who were not less surprised than myself. In a word, during two months, I renewed the experiments daily, and often several times a day, making use of every precaution to avoid deception, and having numerous witnesses around me. I shall now relate the results of these experiments.

During the cataleptic state the muscles presented three different conditions:—Sometimes they were all relaxed, and the limbs could be placed in any position, which they retained, however fatiguing the posture might be; at other times all the muscles were in a state of rigid contraction; at others, again, they were relaxed, and the limbs fell down when raised from the body.

There was no sensibility in any part of the body, except over the pit of the stomach, the palms of the hands, and soles of the feet. Thus we might pinch the skin or pierce it with pins, pull out the hair, tickle the nose, &c., without eliciting any sign of feeling. On the contrary, if the pit of the stomach, soles of the feet, or palms of the hands were touched, even with the point of a feather, the girl immediately withdrew the part touched, and her countenance indicated displeasure. When a Leyden jar was placed in communication with the parts just named, she had a violent commotion, or was suddenly awakened, but the jar might be discharged on any other part of the body without producing the slightest effect.

The ears appeared to be insensible to sound—the loudest noise did not attract her attention; but when a small bell was agitated over the sensitive parts, her countenance shewed that she heard the noise. If the lips were placed in contact with the sensitive parts, she heard everything that was said, although the voice was so low that it could not possibly reach her ears. Her answers were delivered in an exceedingly low tone, and, generally speaking, the person appointed to catch them would repeat them, without

* We have abridged this curious case from the last number of the "Gazette Medicale de Paris," for the edification of mesmerisers and miracle-mongers.—EDS.

having heard the questions asked. It was not necessary to place the lips in contact with the sensitive parts; I often employed a long stick, an iron rod, &c., as a conductor between the mouth of the speaker and the patient's foot, and she heard perfectly well, although the persons placed between her head and the speaker could not distinguish a syllable of the question asked.

The patient never spoke, except when her limbs were in a state of relaxation; during the rigid cataleptic state the tongue and organs of speech were immovable.

The senses of taste and smell were not exercised by their natural organs, but were very acute in the sensitive parts. Thus, we filled the nose with assafœtida, or tobacco; placed bottles of æther, concentrated ammonia, &c., under the nose, without producing the least effect; but when a small portion of a sapid body was placed in contact with the sensitive parts, the patient distinguished it at once. Thus she recognised and named, one after another, the syrups of poppies, vinegar, gum, and capillaire, wine, water, orange-flower water, Seidlitz water, currant jelly, &c., although only one or two drops of each substance was placed on the palm of her hand.

When a few grains of snuff were placed on the sole of her foot, she sneezed at once, and thus easily distinguished common French snuff from English snuff.

Although the results of my first experiments induced me to think that the sense of vision was transposed as well as the other senses, subsequent trials showed that what I had regarded as vision was nothing more than the result of an exquisite sense of touch. When an object was placed on any of the sensitive points, and she was asked if she saw it, she answered "Yes," and immediately named the object if she were acquainted with it, or if not, gave a correct description of the body. Thus she always detected a watch, when placed over the pit of the stomach, and never failed to tell whether it was made of gold or silver, was going or stopped. If asked the hour, she would answer pretty correctly as to the *true* time of day; but if the hands of the watch were designedly changed, she always failed to tell what time they marked. She could distinguish and name every kind of French coin placed in her hand, but not the name of the sovereign under whose reign they were struck; she could distinguish a bit of silk from a bit of cloth, but not their respective colours.

At the second sitting, she succeeded in spelling the word *commerce*, written in large letters, and placed on the pit of the stomach; this required considerable efforts, and she complained for a long time that the attempt produced great fatigue; in subsequent experiments, however, she was never able to distinguish any of the letters of the alphabet, when placed in contact with the sensitive parts. Whenever I asked her to point out the seat of her disease, and indicate to us the appropriate remedies, she refused—answering that such was my business, and not hers.

[The remainder of Dr. Duvard's case is occupied with a history of the treatment, which it is unnecessary to describe. He attempted to magnetise the patient; during the first three sittings she fell asleep, and remained so for several hours, but afterwards all attempts of the kind failed to produce any effect. The use of electricity seemed to be attended with more beneficial results than any other remedy; after the first day the fits of catalepsy and hysteria became less frequent and violent, and the patient returned, much improved, to her friends in the country.]

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JUNE 18, 1842.

Although it be the fashion of the present day to look contemptuously on the labours of the ancients in matters of medical science, it is certain that to them we are indebted for the rudiments of numerous discoveries which pass current amongst us as the result of the march of intellect.

The zeal and perseverance with which some of the earlier anatomists pursued the study of the human frame are beyond all commendation, and were crowned with success commensurate to the labour bestowed.

The writings of the ancients, and especially of the Greek authors, are, however, almost completely unknown to the present generation of medical practitioners, who seem to regard them as musty records of idle speculation, undeserving the notice of practical men.

Yet, independent of the interest which attaches to the study of the older writers on anatomy and medicine, much benefit is to be derived from an attentive perusal of their works; it is always useful to ascend to the sources of knowledge, and occasional voyages of this kind would save many a modern the trouble of discovering facts which were familiar to our predecessors some eighteen or twenty centuries ago.

These reflections have been suggested to us by the perusal of a thesis recently published, on the works of Galen, by M. Daremberg, a talented pupil of the French school. We shall, therefore, make no apology for laying aside our ordinary themes of poor-law persecution and medical reform, to dwell briefly on the knowledge, handed down to us by Galen, on a most interesting point—the anatomy of the nervous system.

Galen seems to have bestowed considerable labour, and no small degree of judgment, in collecting together all that was known at his time respecting the anatomy of the brain. He gives a correct description of the falx major, falx minor, and tentorium cerebelli, and was aware that these folds were furnished by the dura mater. He was likewise acquainted with the use of the *torcular Herophili*, or confluence of the sinuses, which, by-the-bye, Herophilus never described as a *torcular*, but as a reservoir, ληνὸς, the "wine-press" having been suggested by the ignorance of translators. The second membrane of the brain (*pia mater*) is a lace-work of vessels, which envelops

the surface of the brain, and penetrates into its anfractuosities and ventricles. Between the two membranes of the brain there is a cavity or empty space, which may be demonstrated by insufflation, and favours the movements of the organ. Does not this remind one of the cerebro-spinal cavity of M. Magendie ?

With respect to the intimate structure of the brain, Galen carefully describes the corpus callosum, the septum lucidum, and the different ventricles. He thinks that the nervous influence (spirit) passes from the lateral ventricles into the third ventricle, and from the latter into the fourth, through a small canal (aqueduct of Fallopius), which runs under the tubercula quadrigemina. He was acquainted with the inferior prolongation of the lateral ventricles, and with the fact that the optic nerves derive a root from this part of the brain (*corpus geniculatum externum* of the moderns).

The spinal marrow, according to Galen, is a prolongation of the brain; and he reproves Philotimus, who sustained the contrary opinion, being unwilling, as he says, to admit "that the trunk of a tree could grow from a branch." He endeavours to account for the existence of the spinal marrow in the following way, which is more ingenious than philosophical :— "Nature had the alternative of making several long nerves, which would have been liable to laceration during their traject, or of leaving the trunk without sensation and motion; either alternative would have puzzled Prometheus, but the skilful Architect of the Universe triumphed over them by inventing the spinal marrow."

Galen did not regard the olfactory nerves as regular nervous branches; he upholds that the organ of smell resides in the anterior ventricles of the brain.

The optic nerves, according to him, are hollow, and merely decussate without any admixture of fibres. Under the title of second pair, he describes the motor nerve of the eye, but seems to have overlooked the fourth and sixth nerves of the orbit. Galen's third pair corresponds with the fifth of modern anatomists; he describes the frontal and nasal branches of the ophthalmic, and mentions numerous filaments distributed to the teeth, lips, and integuments of the face.

His fourth nerve is distributed to the palate. Under the term fifth pair, he comprehends the facial and auditory nerves; he follows the former, however, through the petrous portion of the temporal bone, indicates its anastomoses with the third pair (our fifth), and its distribution to the muscles of the mouth and face.

Under the head of "sixth pair," he speaks of a nerve passing to the tongue and throat (glosso-pharyngeal), of another distributed to the broad muscle of the shoulder, and of the cervical branch of the pneumogastric. He mentions the superior and inferior laryngeal nerves, and explains, by means of the recurrents, why animals are rendered dumb when the pneumo-gastric nerves are tied. He points out that the nerve of the diaphragm is not derived from the pneumo-gastric, as had been thought, and that the peculiar nerves of the heart are extremely small.

Galen likewise discovered a nervous chord which communicates above with the third pair (fifth of the moderns), and descends through the carotid canal to the neck, where it forms an enlargement (superior cervical ganglion); from the neck the chord passes into the chest, and to the diaphragm; having thus described the origin of our sympathetic nerve, which he classes with the other nerves, Galen proceeds to point out its distribution to the viscera, and its anastomoses with the branches of the pneumogastric and the spinal nerves. Finally, the seventh pair of nerves is distributed to the tongue (hypoglossal).

It is unnecessary to enter into further details; the above will suffice to give an idea of the knowledge which Galen possessed on various points connected with the anatomy of the nervous system.

One of the chief characteristics of the writings of Galen is the constant effort which he makes to reduce everything to a system; hence his attempt to classify the nerves as motor and sensitive. The basis of his theory rests on the idea "that what is *soft* must *feel*, and what is *hard* must *move*;" and this proposition leads him to conclusions which bear some analogy to the approved doctrines of modern physiologists.

Thus, according to Galen, the anterior part of the brain, being softer than the posterior, is the seat of the senses, and as it approaches the spinal marrow it becomes more firm, and gives off motor nerves. The second (oculo-motor) is a motor nerve; the third (fifth) is a double nerve of sensation and motion; the sixth (glosso-pharyngeal, pneumo-gastric, and spinal) is a sensative nerve; the seventh (hypoglossal) is motor.

Did time or space permit, we might elicit from the writings of the Greek author the germs of various other theories which hold a prominent position at the present day; but we cannot conclude without citing a fact which demonstrates how his knowledge of anatomy enabled Galen to detect and successfully combat a very obscure affection of the nervous system.

A Roman sophist was affected with loss of sensation in the little and ring fingers, and in one half of the middle finger. Several physicians of the sect of "Methodists" had treated the disease ineffectually with topical applications. Galen suspected an affection of the spinal marrow, and, on questioning the patient, learned that his complaint was developed shortly after a fall on the back. "I at once," says Galen, "divined that the paralysis was kept up by

chronic inflammation of the spinal marrow; I therefore applied my remedies to the cervical region of the spine, and soon cured my patient." Galen then shows how the spinal marrow had been contused on a level with the seventh cervical vertebra, near the origin of the ulnar nerve, which is distributed to the two last fingers and to one side of the middle finger, and he affirms that, with the assistance of anatomy, we can determine accurately not only the portion of the spinal marrow which is affected, but even the particular nerve.

Assuredly, with all the advantages of modern science, we have not surpassed, if we have equalled, this accuracy of diagnosis.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The members and friends of the Provincial Association are informed that the tenth anniversary meeting will be held at Exeter on Wednesday and Thursday, the 3rd and 4th days of August next, when the attendance of all those interested in the objects of the society is requested.

CHARLES HASTINGS, M.D.,
J. P. SHEPPARD, Surgeon,
Secretaries to the Association.

Worcester, June 14, 1842.

BIRMINGHAM PATHOLOGICAL SOCIETY.

May 7, 1842.

JAMES RUSSELL, Esq., in the Chair.

INFLAMMATION OF THE LUNG.

Dr. FLETCHER exhibited to the society the contents of the thorax of Henry Underhill, aged 19, who had been operated upon for empyema of the left side of the chest, by Mr. George Elkington, in January, 1839, and had died on the 25th of April, 1842, from inflammation of the right lung, after four days' illness, dating from its very commencement.

In the beginning of January, 1839, Dr. Fletcher saw the case, in consultation with Mr. George Elkington. The patient was suffering from all the signs of effusion to a considerable extent on the left side of the chest, which measured about an inch and a half more than the right, and the heart was much pushed to the right side. Mr. G. Elkington had then been in daily attendance upon him from the night of November, 1838. He was first seized with pleuritis of the left side, which afterwards appeared to be complicated with pericarditis; during this period he improved at first, but on renewing his cold he became much worse, and the effusion came on. The propriety of operation was now to be considered, and, as the difficulty of respiration was not imminent, it was thought better to mercuralise and blister the patient until the symptoms became more urgent, or the case improved.

The remedies acted well, but in spite of them the case became so urgent, from the difficulty of respiration, that the operation of paracentesis thoracis was determined upon, and performed by Mr. George Elkington, on the 23rd of January, 1839. About five pints of pure pus flowed through the canula, and rather more than that quantity before it ceased to discharge; an abscess then formed in the vicinity of the puncture, which Mr. G. Elkington opened on the 30th of July, 1839. This continued to discharge a little for some time, but eventually closed. At the first period after the operation, the affected side of the chest became much contracted, sounded dull on percussion, and no respiration was heard, except some slight bronchial at the top of the side, but gradually up to the time of his death the respiratory sounds increased from above downwards, and the sound became more pulmonary in its character on percussion, and the side affected increased in capacity. He so much improved in every respect, as to be able to resume his employment of manufacturing cigars; but was very subject to inflammatory attacks of the right lung on any exposure to cold, which, as must be seen, from his having but that lung in its integrity, placed him in imminent danger. Dr. Fletcher saw him in great danger, from this cause, in December, 1839, also in May, 1840; and at other times, when affected with more slight attacks, he required very prompt treatment; and that at all times the organs of digestion should perform their functions normally, and that the air he breathed should be good and free from dust, to keep him in at all a comfortable state of existence. Dr. Fletcher saw him in February, suffering much from asthma, in consequence of being employed in brass casting, which was immediately relieved on his obtaining an employment in which he was less exposed to a dusty atmosphere.

On Monday, the 25th of April, Underhill sent for Dr. Fletcher, with a message that he wished to see him, as he was in a dying state. He had been ill three days, and had then inflammation of considerable extent in the right lung, from which he died that evening.

The post-mortem examination was made on the morning of the 27th, thirty hours after death.

The body was emaciated, the left side of the thorax was contracted, and the shoulder of the same side was lower than the other. The body very closely represented the plate, given in Laennec, of the contraction of one side after a similar affection. The thorax measured over the nipples 27 inches, the right side 15, the left 12. The ribs of the left side were lower than their corresponding ones on the right, and the cartilages were bent upon themselves. The left lung was very closely adherent to the costal pleura in its whole extent, but was much contracted in size; it only reached anteriorly to the costal ends of the cartilages, and downwards to the seventh rib. The right lung was adherent in many places by elongated adhesions, and projected more anteriorly and to the left side than normal, and seemed in all respects larger than natural; large flakes of lymph were thrown out upon its surface and between the lobes, uniting them together. The heart was adherent throughout the whole extent of its surface to the pericardium. The dorsal vertebræ were curved, having their convexity to the right, and there was no compensating curve in any other part of the spine.

The abdominal and pelvic viscera were healthy,

except that the spleen was bound to the diaphragm by extensive adhesions, which showed that the peritoneum, in that situation, had been affected with severe inflammation.

The contents of the thorax removed from the chest floated on water. The heart was dilated above half its normal size, which equally extended to all its cavities. The left lung was about a third its normal size, of a dark colour, and appeared atrophied, but crepitated on pressure in its whole extent. Its vessels and bronchi were normal in capacity, but appeared shortened; its superior lobe only was seen anteriorly; its inferior lobe was contracted and drawn upwards, and appeared to have fitted into the hollow formed by the superior part of the concavity of the curvature of the spine. A slice cut from it floated on water. The anterior edge of the right lung was in a state of emphysema, with prominent air-blebs formed by the coalition of several lobules, some of them as large as walnuts; they extended all along the two superior thirds of the anterior border. Farther outwards, the lobules were more rounded and bulging than natural from distension, and presented an unusually brilliant appearance; more outwards, the lobules were not so decidedly enlarged, but throughout the whole extent of the lung they appeared dilated and affected with vesicular emphysema. Laterally, and somewhat anteriorly, the lung was infiltrated and in the first stage of inflammation; posteriorly it was in a state of red hepatisation; the separation between these two stages of inflammation was very distinctly marked and abrupt. Portions taken from the differently affected parts of the lung were of very different specific gravity; anteriorly it was very light, and floated lightly on water. A portion taken from the lateral part of the lung, where it was in the first stage of inflammation, was not so buoyant, but still floated. That taken from the hepatised portion sank in water, like a piece of liver.

EXTENSIVE CANCEROUS DISEASE.

Dr. Blakiston laid before the society specimens of cancerous deposit in the liver, glands of the gastro-hepatic omentum, pancreas, bronchial glands, and lung. The subject from which these morbid specimens were taken was a car-driver, a man of small stature and spare habit of body, who was admitted into the Birmingham General Hospital, under Dr. Blakiston, February 24, 1842.

For six months he had been labouring under a severe and shooting pain, which seemed to radiate from the epigastrium towards each hypochondrium, and which at first was intolerable in the recumbent posture. He had become much emaciated, and had thought that the right hypochondrium had increased in size. At the time of admission, his countenance was pinched and anxious, expressive of much bodily suffering; he was emaciated, and there was an earthy, leaden-coloured appearance over the countenance, especially under the eyes; the pulse was small and feeble, but not frequent. He experienced great pain in the epigastrium, shooting backwards and towards each side. Neither the organs of respiration or circulation presented any physical signs of disease. His appetite was moderate, and the bowels acted freely. The abdomen sounded dull on percussion about two inches below the level of the ribs on the right side, and about four inches on the left, where was felt the hard, abrupt edge of some solid rough body, apparently intimately connected with the left side of the liver, and not raised by pressure upwards from the left loin. The diagnosis given was *malignant disease of the liver*.

The hydrochlorate of morphia was administered, and was followed by some mitigation of pain. Towards the end of March the right hypochondrium had become perceptibly larger. Dr. Blakiston thought he felt a round hard tumour deeply seated under the ensiform cartilage. Disease of the glands of the gastro-hepatic omentum was added to the diagnosis. The pain being now severe, a blister was applied to the epigastrium, and morphia was sprinkled on the vesicated surface without relief. The dose of morphia given internally was then increased with benefit. Ascites and œdema of the feet soon came on, and the conjunctiva became slightly tinged with yellow; he gradually became more feeble and emaciated, and was afflicted with dryness of the mouth, some dimness of vision, and severe pain and giddiness in the head; he began to feel a pulsation under the ensiform cartilage like the ticking of a clock. He died, worn out, May 3, 1842.

Autopsy.—The *heart* was small, but presented no unnatural appearance, except a slight thickening of the free edges of the tricuspid and mitral valves, all of which, however, acted perfectly.

The left lung, at its lower and outward portion, adhered closely to the ribs over a space of the size of a half-crown piece. Here it had a dark puckered appearance; when cut into, a cavity was found which might have contained a walnut, presenting a dark appearance, but containing no fluid, and having no lining membrane; at its inner side was a mass of cancerous deposit nearly as large as a date, the part of which nearest the cavity resembled it in consistence, gradually becoming hard and white as it receded from the cavity. A little above this were two or three small cavities of a similar kind, entirely empty, and communicating with the interlobular fissure by smooth rounded apertures, into which the pleura of the fissure seemed drawn for a very short distance. One of the bronchial glands was about the size of a large date, and contained a mixture of its own material, and of hard, white, and yellow caseous-looking masses.

In the *abdomen* were several pints of clear yellow serum.

The *liver* projected much below the ribs, and was hard to the touch; its convex surface was studded with cancerous tubera, from the smallest size nearly to that of an egg. They were all depressed at the centre, were white, with fringes of blood-vessels around their circumference. On being cut into they were of scirrhous hardness, except the largest, which was slightly softened in its centre, and there exuded from their cut surfaces a thick yellowish slime. The substance of the liver was yellow.

The *glands* of the gastro-hepatic omentum were converted into similar masses, and were glued to the *pancreas*, a portion of which, particularly one tip or edge, was in a scirrhous state.

Dr. Blakiston remarked, that, in the opinion of some, the central depression observed in cancerous

tubera, like those which he laid before the society, indicated their slow development. In this case they had probably existed at least for many months; it was, however, worthy of notice, that the smallest tuber had this depression equally well marked with the largest.

It was extraordinary that not a trace of the cancerous matter in a fluid state could be found in the cavities in the left lung, where it must have existed, and when in one case the process of absorption seemed actually to have been going on at the time of death. The state of this lung was not such as to afford any marked physical signs of disease, the extent of lung diseased being very small, and the cavities containing no fluid which could give rise to moist rattles. The crude mass could not be indicated by dulness on percussion, as it was separated from the parietes of the chest by a cavity formed by the absorption of a portion of it. So also the bronchial gland had not reached such a size as to give rise to any physical signs of its diseased state. In a case, however, which he had mentioned to the society some time back, the superior vena cava had been embraced by the bronchial gland which had been invaded by this disease, and œdema of the head, neck, and arms supervened.

The malignant disease of the liver had been recognised by the touch on the left side. The rough tumour felt in the left hypochondrium could not be an enlargened spleen, as it did not follow the oblique direction which such tumours usually do; and not being affected by upward pressure from the region of the kidney, it could not be considered to be connected with that organ. It seemed traceable under the ribs on that side upwards, and downwards it presented a hard, sharp, well-defined edge. The right lobe was proportionably enlargened, and, therefore, descended much lower than the left lobe; but about two inches below the lower margin of the thorax it dipped down into the abdomen at a considerable angle, and thereby allowed the intestines to interpose themselves between its lower half and the abdominal parietes, so that it could not be felt. The cancerous nature of the disease was inferred both from the roughness of the abdominal tumour and the general appearance of the patient. The violent shooting pain he suffered formed no element of the diagnosis, as Andral and others had shown by experience that it was of no value as a diagnostic sign in such cases. It was the opinion of some that the absence or presence of pain depended on the degree in which the peritoneal covering of the liver was involved; in other words, whether the tubera were superficial or deeply-seated in the parenchyma of the organ. It was well known, however, that chronic peritonitis was seldom attended with pain of this kind. Dr. Blakiston, moreover, stated that, in conjunction with Dr. Huey, he had attended a late eminent architect who died of cerebral affection. He had had intestinal hæmorrhage, but had experienced no pain of any severity in the abdomen, and yet the convex surface of both lobes of the liver was thickly studded with cancerous tubera, some of which were of large size, and projected far above it.

Dr. Blakiston felt disposed to attribute the pain in the epigastric region in this case to the compression of the nerves in that locality, which were involved in the mass of cancerous disease which was situated in the gland of the gastro-hepatic omentum, and in the pancreas. Of these the nervus vagus, at least, was probably more sensitive than those which had already reached and were distributed in parenchymatous organs. He mentioned the case of a man at Cambridge, who suffered similar pain, and in whom the only disease that could be discovered was situated in these glands, which were filled with round calcareous masses, which, though constituting a different disease, would affect the nerves in the same physical manner as in this case.

He was led to diagnosticate the disease of these glands partly from the nature of this pain, and partly by touch; but he did not consider that either or both of these signs formed a sufficient basis for an accurate diagnosis. This view of the case was confirmed, however, at a later period of the illness, by the ticking sensation in the epigastrium, which was, doubtless, caused by the propagation of the pulsations of the abdominal aorta to the walls of the abdomen by the mass of diseased glands, and which was felt by the hand. The affection of the pancreas afforded no physical sign of its existence apart from that furnished by the diseased gland over it; nor did Dr. Blakiston know of any general signs which could be relied on as furnishing evidence of such an affection.

The diagnosis had been so far valuable, that it had prevented the patient being subjected to unnecessary torture in the hope of cure, and had limited the efforts of his medical attendants to the mitigation of his sufferings.

Dr. Melson said, at the close of Dr. Blakiston's observations, that John Aston had formerly been an out-patient of the Queen's Hospital, suffering from a severe attack of general rheumatism, with extension of the disease to the inner membrane of the heart, indicated by a well-marked and persistent *bruit de souffle*. The souffle yielded to the iodide of potassium treatment, but the general rheumatism assumed a chronic character. Throughout the whole of Dr. M.'s protracted attendance upon the patient, he had suffered most acutely from a pain in the side, corresponding in situation accurately with the pulmonary lesion now exhibited. This pain was perfectly invincible, and was the great source of his suffering. He dated its origin from a severe blow which he had received from a drunken man whilst following his ordinary avocation as a carman.

ACADEMY OF SCIENCES, PARIS.

June 6.

COMPOSITION OF CONFINED AIR.

M. Felix Leblanc read a memoir on the composition of confined air. The author had analysed, after the method of M. Dumas, the air collected from various localities, as the wards of hospitals, the theatre, chamber of deputies, &c. Finally, he analysed atmospheres rendered poisonous, either by pure carbonic acid, or the products of combustion. At the time of taking the air, every circumstance of any importance was noted, such as the temperature, ventilation, &c.

Air in Hot-houses.—In air collected during the evening, the relative proportions of oxygen and nitro-

gen were the same as in atmospheric air; but the carbonic acid had completely disappeared under the influence of vegetation.

In a Bed-chamber.—The chamber was closed for eight hours, but the air was the same as atmospheric air.

In Hospitals.—In one of the wards of la Pitié, which was closed during the whole night, the air contained five times more carbonic acid than normal; the oxygen had disappeared in a proportionate degree. In a dormitory at Salpetriere, the air contained 8-1,000ths of carbonic acid.

Lecture-rooms.—In a public lecture-room at the Sorbonne, which contained 1,000 cubic yards *(metres)*, and nearly 900 persons, after a lecture of an hour and a half (although two doors were constantly open), one per cent. of the oxygen had disappeared, and the carbonic acid had increased in a greater proportion. This shows the utility of artificial ventilation.

In various other localities, the proportions of carbonic acid varied from 3-1,000ths, to 43-10,000ths.

The author subsequently determined, by experiments on animals, that the dose of carbonic acid which they can support without immediately perishing is much greater than that contained in an atmosphere rendered destructive by the combustion of carbon. Experience shows that the proportion of carbonic acid in confined situations increased with their presumed insalubrity, and furnishes, as it were, a measure of it.

According to the experiments of M. Peclet, from 6 to 10 cubic metres of air ought to be furnished every hour, to each adult, and this calculation corresponds pretty closely with the results of M. Dumas's experiments; according to the latter, the effect of respiration from one person during an hour, will be to give 4-1,000ths of carbonic acid, to 3 cubic metres of air, or 2-1,000ths to 6 cubic metres. But in the actual state of things, at least in the ventilated situations, examined by M. Leblanc, the proportion of carbonic acid is not so high.

In inhabited places, where the ventilation is very imperfect, and especially where there are no chimnies, the imperfect ventilation generally effects a change equal to about one half of that which takes place in rooms perfectly closed.

Thus a dormitory, containing fifty persons, and remaining closed during eight hours, ought to have 2,400 cubic metres, or about 50 for each person during the night; afterwards ventilation becomes absolutely necessary.

The analysis of artificial atmospheres seems to prove that life cannot continue beyond a few minutes in air containing 30 per cent. of carbonic acid; the power of resisting asphyxia, under these circumstances, is less in proportion as the natural temperature of the animal is elevated. No decisive experiments had as yet been made to show the degree of alteration produced in air by the combustion of carbon, necessary to make it poisonous. The author shows that the introduction of 3 to 4 per cent. of carbonic acid into an atmosphere proved suddenly fatal to a large dog.

The oxide of carbon seems to play the chief part in the production of the fatal effects which follow the combustion of charcoal.

STRUCTURE OF THE NERVOUS SYSTEM.

M. Mandl presented an extract from a memoir on the intimate structure of the nervous system. It results from the microscopic researches of the author that the nervous system consists of two parts, one white and the other grey. Each of these parts has a central and peripheral portion, and therefore constitutes in itself a whole. The central portion of the white part is found in the white substance of the brain and spinal marrow, and its peripheral portion in the cerebro-spinal nerves; the central portion of the grey substance is formed by the cortical substance of the nervous centres, and the peripheral portion by the ganglionic system.

The two parts of the nervous system are not com pletely isolated from each other, but a greater or less quantity of fibres of one is always mixed with the other.

EVOLUTION OF LIGHT FROM LIVING ANIMALS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In Sir Henry Marsh's interesting paper on the Evolution of Light from Living Animals, published in your Journal of the 4th of the present month, I find the following passage:—"Macartney and Todd believe that the luminous organs concentrate, and modify the nervous influence, so as to form it into light." It is probable that Sir Henry has not read my paper lately, which may account for his misapprehension of my meaning. I shall beg you, therefore, to insert in your Journal the following extract from the paper I communicated to the Royal Society in 1810, which will show the conclusions I adopted, as the consequence of numerous observations and experiments made on animals endowed with the singular power of evolving light:—

"The luminous property is not constant, but in general exists only at certain periods, and in particular states of the animal's body. The power of showing light resides in a peculiar solid substance, or fluid, which is sometimes situated in a particular organ, and at others diffused throughout the body of the animal. The light is differently regulated when the luminous matter exists in the living body, and when it is abstracted from it. In the first case, it is intermitting, or alternated with periods of darkness; is commonly produced or increased by a muscular effort; and is sometimes absolutely dependant upon the will of the animal. In the second case, the luminous appearance is usually permanent until it becomes extinct, after which it may be restored directly by friction, concussion, and the application of warmth, which last causes operate on the luminous matter (*while in the living body*) only indirectly, by exciting the animal. The luminous substance, in all situations, so far from possessing phosphoric properties, is incombustible, and loses the quality of emitting light by being dried or much heated. The exhibition of light, however long it may be continued, causes no diminution in the bulk of the luminous matter; it does not require the presence of pure air, and is not extinguished by other gases.

The luminous appearance of living animals is not

exhausted by long continuance or frequent repetitions, nor accumulated by exposure to natural light; it is, therefore, not dependant upon any foreign source, but *inherits as a property in a peculiarly organised animal substance or fluid*, and is regulated by the same laws which govern all the other functions of living beings."

Your very faithful servant,

JAMES MACARTNEY.

35, Upper Merrion-street, Dublin,
June 11, 1842.

COLLECTANEA MEDICA.

FROM THE NOTE-BOOK OF

J. D. JEFFERY, Esq., Surgeon, Sidmouth.

ABERCROMBIE'S MAXIMS FOR MEDICAL MEN.

1. Cultivate a habit of steady and continuous attention.
2. Exercise strict control over the succession of your thoughts.
3. Keep up an animated, inquiring state of mind.
4. Maintain a habit of correct association of facts according to the relation of cause and effect.
5. Select carefully the subjects to which the mind is directed.
6. Carefully abstract the operation of the judgment from the influence of imagination or passion.

DIFFICULTIES OF THE MEDICAL PROFESSION NOT TO BE CONSIDERED AS DISCOURAGEMENTS.

From the picture that has been exhibited of the innumerable doubts and difficulties which clog the attainment of medical knowledge, and embarrass the application of it to practical purposes, the timid, sceptical, and indolent may be discouraged from studies, apparently so arduous in their prosecution, and so questionable as to the efficiency and utility of their result. But it is not from characters of this description that any good can be expected in any of the useful arts of life.

If a like despondency were to pervade mankind in general, there would be an end to all that enterprise and energy which alone can enable them to act up to their destiny, and follow up those pursuits upon which the perfection of their nature depends.

As the senses would have lain dormant for ever had there been no external objects to stimulate them, so the faculties and virtues which characterise rational nature and civilised life would never have been developed, but through the excitement of those pains, wants, difficulties, and dangers inseparable from human life. By no other arrangement could our duties, our happiness, our mental and bodily perfections, have been bound together in one harmonious and consistent system.

Let us compare the art of medicine, under this aspect, with those of navigation and agriculture.

Had man been furnished by the Creator with wings, by which he could have traversed all seas and oceans, so as to supersede the use of ships, where would have been that hardihood of character and all those ingenious devices which have called forth the active energies and deep researches of the human mind?

If, contrary to the actual institutions of Providence, the life of man had been sustained by the spontaneous productions of nature, instead of the products of industry, neither the faculties of the mind nor the powers of the body could ever have been developed; man would have been little superior to the brutes; his active and inventive energies would have lain asleep for ever; there would have been no room for the talents exercised in the procuring of food, raiment, and shelter, nor in commercial intercourse; all the mutual and endearing ties of social and civilised life; all trades and professions, arts and sciences, whether ministering to accommodation or elegance, constituting man's greatest felicity, whether as objects of pursuit or enjoyment, would have been unknown and untasted. —*Sir G. Blane's Medical Logic.*

ANECDOTE FLATTERING TO THE MEDICAL PROFESSION.

But the anecdote most flattering to the medical profession which I should recal to your remembrance, is the occasion of the first establishment of the East India Company's power on the coast of Coromandel, which was procured by the favour of the Great Mogul to one of our profession (Gabriel Boughton, of the ship Hopeful), in gratitude for his efficient help in a case of great distress to the monarch.

It seems that, in the year 1636 (a very early period of our direct intercourse with India), after the Portuguese had discovered the passage thither by the Cape of Good Hope, one of the princesses of the Grea Mogul's family had been burnt dreadfully by accident, and that a messenger was sent to Surat, where foreign traders resorted, to desire the assistance of one of the English surgeons there, for they had acquired a great reputation among the natives for their skill in the cure of diseases. Gabriel Boughton proceeded forthwith to Delhi, and was successful in performing a cure; on which the Great Mogul's minister asked him what his master could do for him to manifest his gratitude for so important a service. Gabriel answered with a disinterestedness, a generosity, a patriotism beyond my praise, "Let my nation trade with yours." "Be it so," said the minister. A portion of the coast was marked out for the future resort of English ships, and all duties were compromised for a small sum of money. A better station, it is true, at the mouth of the Hoogly river, some twenty years afterwards, was chosen, and Calcutta was built; but here was the first establishment of our power—here did the civilisation of that vast continent begin. From hence the blessed light of the gospel may have been first promulgated amongst one hundred millions of native idolators, since subjected to British power, and made partakers of our enlightened comforts."—*Sir H. Halford, Med. Gaz.*

ASTHMA—DR. CLUTTERBUCK'S VIEWS.

Difficulty of breathing (dyspnœa) may arise from various causes affecting the organs of respiration; the most frequent, perhaps, is a preternatural thickening of the membrane lining the air tubes, the consequence of repeated catarrhal inflammation.

When the affection returns periodically, it has been called nervous or spasmodic asthma—implying, of course, that the immediate cause of the paroxysm is spasmodic action of the muscles.

But no muscular structure is found in the course of the air tubes, with the exception of the larynx; and it is quite evident, from the manner of breathing in these cases, that the impediment is not seated in that part of the tube. During the paroxysm of asthma, the air passes into and out of the lungs slowly, and

with great labour and effort on the part of the muscles, both of inspiration and expiration, exactly in the way we should expect from a narrowed state of these passages. Now, there is no necessity for supposing the existence of spasm in order to explain the difficulty of breathing in such cases; it is sufficient to show the way in which the paroxysm may take place without the aid of such a cause.

In most cases of periodical asthma, the disease may be traced back to catarrhal inflammation as its source. Repeated attacks of this inflammation induce, at length, a permanent thickening of the membrane affected, and accordingly it is found I believe with hardly any exceptions, that asthmatic patients breathe with more or less difficulty at all times, and in such a manner as to indicate clearly a narrowing of the canal in the smaller ramifications of the tube. Any additional impediment to breathing, therefore, will cause such an aggravation of symptoms as to constitute a paroxysm, or asthmatic fit. Thus a fresh attack of inflammation (from taking cold, as we term it) on the already diseased and thickened membrane, by producing additional fulness or swelling, renders breathing nearly impossible, leaving no passage scarcely for the admission of air into the lungs, and requiring the utmost efforts of the muscles of inspiration to expand the chest. The difficulty continues (in other words, the paroxysm lasts) till the swelling of the inflamed membrane subsides—an effect which seldom occurs until a copious secretion of mucus has taken place, when the paroxysm terminates, and this is the case in by far the greater number of instances of the disease.

Other causes of an irritating nature produce a similar effect, by increasing the action of the vessels of the part, and consequent fulness, which, though it may not amount to actual inflammation, has all the effect of this while it lasts. Thus, the inhalations of acrid vapours of any kind, will bring on a paroxysm of asthma where the predisposition to the disease happens to be unusually strong, though the duration of the paroxysm in such cases is less than where actual inflammation arises; for this has a determined and most protracted course.

Asthma, therefore, in a great proportion of instances, appears to be a catarrhal affection in its origin, while the paroxysms are brought on by temporary causes of vascular excitement producing fulness and thickening of parts, which continue until the increased vascular action again subsides. The returns of the paroxysms are favoured by predisposition, this predisposition appears to consist in an acquired irritability, the natural and ordinary consequence of a previous inflammation. The suddenness of the attack, in many instances, furnishes no valid objection to this theory; for the same thing may be observed in another portion of the membrane—namely, that which lines the nostril, where, from taking cold, or the application of tobacco, or other irritating causes, these passages become almost instantly obstructed, and are not again pervious until an increased secretion of mucus from the surface reduces the vascular excitement upon which the fulness and consequent obstruction depend; thus affording the strongest analogical proof of the correctness of the theory advanced.

What has been now said applies to by far the greater number of cases of confirmed or periodical asthma, the paroxysms of which are readily explained upon the ground stated—viz, the temporary increased arterial action in the bronchial membrane. There is, in fact, no necessity for recurring to spasm in order to account for the phenomena of the disease.—*Med. Gaz.* July 14, 1838.

MUSCULAR STRUCTURE IN THE BRONCHIA.

I must confess that I have in vain looked for the apparatus described by Reissessen (of a circular muscular nature) in the smaller bronchial ramifications of the human subject, but their distinct existence in branches of a larger calibre. Some facts already stated by me, and the phenomena of several of the varieties of asthma, lead me to regard as certain the temporary occlusion, by spasmodic contraction, of the larger bronchial ramifications—*Laennec, Diseases of the Chest*, p. 90.

TREATMENT OF PAROXYSM OF ASTHMA.

If the patient can be made to drink by small and repeated portions during the paroxysm, this is sensibly diminished both in severity and duration; the effort of deglutition favouring and producing deeper inspirations, probably by counteracting spasm of the bronchiæ.—*Ibid*, p. 102.

In the severer asthmatic paroxysms, it is frequently necessary to have recourse to venesection, in order to relieve the congestion of blood in the lungs, and it is always proper to diminish the necessity of respiration by means of narcotics.—*Ibid*, p. 165.

MECHANISM OF EMPHYSEMA.

I am now well assured that if we carefully examine the lungs of subjects who have long suffered from dyspnœa, from whatever cause, we shall almost always find more or fewer of the air cells dilated.—*Ibid*, p. 155.

It has been shown that in dry catarrh the smaller bronchial tubes are frequently completely obstructed, either by the pearly sputa or by the swelling of the inner membrane. Now, since the muscles of inspiration are numerous and powerful, while expiration, on the other hand, is produced merely by the elasticity of the parts, and by the feeble contraction of the intercostal muscles, it must frequently happen that the air which, during inspiration, had overcome the resistance opposed to its entrance by the tumid state of the bronchial membrane and the sputa, is unable to force the same obstacles during expiration, and remains, therefore, imprisoned in the cells by a mechanism somewhat similar to the valves of an air-gun. The succeeding inspirations, or, at least, such of them as are energetic, introduce a fresh supply of air into the cells, and thereby necessarily occasion their dilatation, and, provided the obstruction is of some continuance, the dilated condition of the cells will be rendered permanent. The increased temperature, and consequent dilatation of the air, after it is received into the lungs, will have some effect also in distending the containing cells.—*Ibid*, p. 160.

SYMPATHETIC ASTHMA.

I have met with one case to which I can only apply the above title. Gooding's child, aged two years (female), near Sidmouth, was brought to me January 13, 1840. She appeared quite asthmatical; the shoulders raised to the ears, and the act of breathing was difficult, accompanied with a loud wheezing; she had

not suffered from fits, and her mother affirmed that the child had always been affected with the complaint (asthma), and she believed that it inherited it from the father, who suffered from it. The bowels being much confined, I ordered some aperient powders containing calomel, one to be taken daily. In the course of four days nine large lumbrici were ejected by the mouth, and three from the bowels. The child became lively and quite well as soon as the worms were expelled.

Obs.—I have met with several cases in which different diseases were simulated through the presence of worms in the stomach, all bad symptoms having disappeared on their ejection by vomiting. I never knew so many brought up at one time as by the child above mentioned.—J. D. F.

IS RHEUMATISM A SPECIFIC INFLAMMATION?

Rheumatism has long been considered a specific inflammation, by which I mean one not presenting the usual phenomena, nor running the usual course of common inflammation.

John Hunter was of this opinion. It has of late, however, been questioned with ability; yet I confess I adhere to the old opinion, and on the following grounds:—

1. The migration to all parts of the fibrous tissue is unique. You see it not in inflammation of any other tissue, nor even in common inflammation of the fibrous tissue.

2. The very slight tendency to suppuration, ulceration, and adhesion, is peculiar; for all these processes are common in ordinary inflammation of fibrous tissues, as from injuries, &c.

3. The perspirations are unique; even the whiteness of the tongue is singular.

4. The excessive buffing and cupping of the blood, sometimes even after the utmost possible venesection, is extraordinary, and seems to indicate something peculiar in the constitution of the blood.

5. Experience shows that this disease is less certainly and uniformly relieved by antiphlogistic treatment than other inflammations.

All these circumstances evince, I think, something peculiar, "specific," in the system, or, if you please, in the vital constitution of the blood, which I believe is M. Andral's opinion.

I have dwelt a little on this subject, not from the love of idle speculation, but because if the inflammation be specific, we are not rigidly bound in the treatment by the ordinary principles of inflammation, if we find them less than usually successful, but are justified in circumspect deviations approved by experience."

Mode of Treatment.

1. The bleeding and purging, or pure antiphlogistic plan.—Edinburgh Infirmary.

2. The forced sweating plan.—Dr. Gregory.

3. The stimulant plan, by bark, guiacum, &c.—Drs. Morton, Fothergill, and Haygarth.

4. The colchicum plan—apt to produce an intractable dysenteric diarrhœa, if solely relied on.

5. Calomel and opium plan.—Dr. Chambers.

It is this latter plan which, with some modification, Dr. Hope has found most efficacious in acute rheumatism.

1st, after a full venesection, or even two in the robust, but without bleeding in the feeble and delicate, I give every night seven to ten grains of calomel, with half a grain to two grains of opium, according to the age and severity of the case, and every morning a full haust. sennæ to act four or five times at least.

In addition, I generally give the following draught twice a-day, as it appeared to me to expedite the cure, partly, perhaps, by the additional opiate and partly by the sedative effect of the colchicum:—

Colchicum wine, fifteen to twenty drops;
Dover's powder, five grains;
Saline mixture, ten drachms;
Syrup, one drachm.

When the pain and swelling are greatly abated, if not almost gone (which often happens within two days, and almost always within four), I omit the calomel; or if the gums become, in the slightest degree, tender, I omit it even earlier. The opium I continue to the extent of one grain or half a grain at bed-time, and in severe cases I add a grain at noon, for without an anodyne the pains are apt to recur; I also continue the colchicum draught and haust. sennæ as before.

No local treatment is necessary beyond warm or cold applications, according as the patient finds them agreeable.

If the patient is not well in a week, I consider it a case of exception, and the exceptions are generally in those who are subject to rheumatism, and who therefore usually have it in a more obstinate and chronic form.

The advantages of this plan are—

1. That a patient is generally sound, well, and fit for work in a week or ten days after the pains have ceased.

2. That the gums are rarely affected, especially if you previously ascertain that the patient has not a morbid susceptibility of mercury.

3. That it is rare to see inflammation of the heart if the treatment is early begun (I think that one case in a dozen would be the maximum in my practice).

4. If the slightest symptom of endo or peri-carditis does supervene, a few extra doses of calomel and opium, as calomel ten grains, opium one grain, every four or six hours, will generally affect the constitution in twenty or thirty hours, which, with two or three cuppings or leechings on the region of the heart, almost always places the patient in a state of safety. I have never lost a patient by rheumatic pericarditis since I employed this plan, and I have been told by other hospital practitioners that they have been equally successful by the use of calomel and opium.

I have tested this plan by successively omitting the purging, bleeding, &c., and with each omission I have found the recovery less expeditious.

Dr. Hope says that he never met with a case of cerebral metastasis in rheumatism. I have met with a case which I should consider to be of that nature, and which proved fatal.

Israel Holmes, labourer, aged 38, had long been the subject of acute rheumatism at repeated intervals, from which he had often been relieved by venesection and calomel and opium. He was seized, December 1837, with a severe attack of his old complaint, accompanied with intense pain in the head and delirium. He was bled freely, &c., but soon died with every symptom of phrenitis.—J. D. J.

ROYAL COLLEGE OF SURGEONS IN LONDON.

The Council of the College, desirous of furnishing to the public a correct list of their members, request that each member will be pleased to transmit to the secretary, between the 1st of June and 1st of July in every year, by letter, a statement containing his name, address, and date of diploma, in his own handwriting, in order that it may be compared with the Chronological List.

The President and Council, in publishing the corrected list of the members of the present year, with the date of each diploma, regret that so many members have omitted to make the return requested by the Council. They are anxious to explain to the members, that the object of this annual registration is to furnish the judges, magistrates, clerks of the peace, poor-law commissioners, boards of guardians, and the public generally, with a correct list of qualified surgeons, in order to prevent the various impositions which have been practised upon them by ignorant pretenders and other unqualified persons.

The names of all members who shall not have registered themselves previously to the month of July, 1843, will be omitted in the corrected list of that year.

The President and Council particularly wish to intimate to all public functionaries, that no diploma can be genuine in which there is any erasure, interlineation, or other alteration.

N.B.—The corrected list for 1843 may be purchased at the College for one shilling.

EDMUND BELFOUR, Sec.

14 June, 1842.

ROYAL COLLEGE OF SURGEONS IN LONDON.

The second and concluding lecture on the Fossil Remains of Extinct Animals, will be delivered in the Theatre of the College, by PROFESSOR OWEN, F.R.S., on Wednesday, the 6th of July, at nine o'clock in the evening.

Tickets of admission will be delivered to members of the College upon personal or written application to the secretary at the College.

By Order,

EDMUND BELFOUR, Secretary.

June 14, 1842.

Mr. Wheatstone was appointed corresponding member of the Academy of Sciences, Paris, on the 6th of June. The same distinguished honour has been conferred on Professor Forbes, of Edinburgh.

OBITUARY.

M. Double, member of the Academy of Sciences, and of the Royal Academy of Medicine, died suddenly in Paris, on the 13th ultimo, of pulmonary apoplexy.

PROMOTIONS AND APPOINTMENTS.

War-office, June 14.

29th Foot—Assistant-surgeon John Robert Taylor, from the staff, to be surgeon, vice Ingham.

54th—Surgeon Charles Thomas Ingham, M.D., from the 29th, to be surgeon, vice Stephenson, deceased.

82nd—Staff-surgeon of 2nd class, Thomas David Hume, M.D., to be surgeon, vice Allman, who exchanges.

Hospital Staff—Surgeon George Allman, from 82nd, to be staff-surgeon of 2nd class, vice Hume; Daniel Cooper, gent., to be assistant-surgeon, vice Taylor, promoted.

NAVAL.

Surgeon J. M. Deas, to the Columbia.

Assistant-surgeons—James Mitchell, to the Albatross; M. C. Trench, to the Philomel; Evan Evans and Fysher Negus, to Haslar Hospital.

Assistant-surgeons H. H. Hammond, A. J. Little, and A. Stewart, to be surgeons.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, June 10, 1842.

Charles James Symonds, William Taylor, Robert Roberts, Thomas William Damant, George Trevor Raper, William Henry King, Justin Mc Carthy, James Armstrong, James Russell, William Bryckwood Tomkin, Anthony Prat, Richard Palmer, George Charles Stacpoole, Howell Evans.

Monday, June 13, 1842.

David Simpson Penrice, Corbett Whitton, John Wilson, John Henry Pollard, Edgar Sheppard, Edward Dudley Hudson, John Richards, Richard Forth Snape.

APOTHECARIES' HALL.

Licentiates admitted Thursday, June 3, 1842.

T. Leonard, S. W. Rayne.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

TERMS.

One Year	£1 10 0
Six Months	0 15 0

TO CORRESPONDENTS.

An Union Surgeon.—The commissioners have recently issued a document to prove that they cannot alter the clauses disqualifying Irish and Scotch graduates.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

Printed by SAMUEL TAYLOR, of 6, Chandos-street, in the Parish of St. Paul's, Covent-garden, at his Office, No. 6, Chandos-street, aforesaid; and published by HENRY RENSHAW, at his residence, No. 356, Strand.—Saturday, June 18, 1842.

PROVINCIAL MEDICAL JOURNAL

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ADDRESS DELIVERED

BEFORE THE

MEMBERS OF THE SHEFFIELD MEDICO-CHIRURGICAL SOCIETY,

AT THE LAST

MEETING FOR THE SESSION 1841-2.

By Charles F. Favell, M.D.

(*Concluded from our last.*)

Class II.—*Abnormal Cerebral Circulation.*—I shall next briefly notice another example of abnormal cerebral circulation which was introduced by Mr. Skinner. The patient was a stout-looking girl, aged eleven, and was employed as a nursemaid. For a period of three weeks she had been suffering from pain in the head, accompanied by considerable sickness, when she was suddenly seized with severe pain at the epigastrium, and nausea, and shortly afterwards with violent and general convulsions. There was pain in the head, the pupils were contracted, the conjunctivæ congested, and the pulse was extremely quick. The bowels had been constipated for several days previously. The spasm of the muscles gradually relaxed, but very speedily returned again. During the intervals the patient was perfectly sensible, but had lost her memory. She was freely bled, and took some active purgative medicine, and in three days was completely cured.

The discussion which followed the recital of the above case had reference to the nature of the affection; and the questions which chiefly divided the meeting were, whether it ought to be regarded as a simple case of affection of the excito-motory system, the cerebral disturbance being occasioned by the deranged condition of the chylopoietic viscera—whether there was not some amount of congestion of the vessels at the base of the brain, or whether the case was not an aggravated example of hysteria. The decided relief which resulted from the vigorous depletory treatment which was adopted, however, perhaps entirely excludes the hypothesis last mentioned. It is not improbable that both the other views were to some extent correct, that some amount of vascular congestion existed at the base of the brain, and was excited by the disordered state of the alimentary canal. It is extremely interesting and important to bear in mind the close and intimate sympathy which subsists between the head and the primæ viæ. It often happens that cerebral disturbance is the first urgent symptom which results from a disordered condition of the stomach and bowels, whilst pain at the epigastrium, or an attack of vomiting, is not unfrequently the precursor of the most formidable cerebral disease.

I proceed now to notice the communication which was read to the society by Mr. W. Jackson, and which I have ventured to place under the present general division of subjects. Mr. Jackson designated his paper "Cases illustrative of Disease chiefly situated in the Cerebellum." He detailed three cases which had occurred in his own practice, and their interest certainly claims for them a more extended notice than my present limits will allow. The subject of the first case was a married man, aged twenty-five, of fair, florid complexion, and tumid lips, who had generally enjoyed a good state of health. He had been ill about twelve months when Mr. Jackson first saw him. The commencement of the affection was attended with paroxysms of severe pain in the head, confined at first to the upper and anterior part, but for four months past it had been fixed to the upper and back parts of the head and neck, shooting forward around the forehead. During the continuance of these seizures the face was flushed, and the head steadily fixed in a position slightly inclined forward. Subsequently, when the attacks became more severe, the head was held by an attendant, and the patient urgently requested that forcible pressure should be made upon the back of the head and neck. These paroxysms often recurred at short intervals, and were excited by apparently slight causes. The pulse was generally unaffected during the intervals of the attacks, and varied considerably under their influence, sometimes being exceedingly rapid, and at other times very slow. On one occasion it was reduced to 40. There was no loss of consciousness, nor any impairment of the senses. The most invariable symptom was extreme vertigo. "The general character of the attacks," Mr. Jackson remarked, "resembled, in a striking manner, hysterical affections; and this similitude was still further confirmed by the great relief afforded by fresh air, more or less appearance of globus, together with, on many occasions, a copious discharge of limpid urine." The state of the mind, which was alternately cheerful and desponding, and the perfect relief which occasionally resulted from any new excitement, such as the introduction of a strange, enlivening conversation, or even the direction of the mind to any important subject, were further evidences of similarity. During the last fortnight of his life the patient had only one severe return of the painful attacks. He considered himself so much better that he undertook a journey on business to Liverpool, and from thence proceeded to Leeds, where he died on the 13th of October, after a severe but unexpected paroxysm: On a post-mortem examination, which was conducted at Leeds by the late Mr. Thackray and Mr. Jackson, the following were the most remarkable appearances which presented themselves:—The cerebellum was somewhat softened, and in the centre of the left lobe was found a well-defined tumor, as firm as the substance of the kidney, whose diameter was an inch and a half, having a whitish grey outer coat, and

being white within. The general aspect of the tumor resembled those found in scrofulous subjects.

The second case related by Mr. Jackson was that of a man, aged forty-four, in whom the chief symptoms were severe pain in the head, which was referred to the vertex, and more posteriorly, and which returned in paroxysms, constant vertigo, and frequent sickness. On a post-mortem examination, the left lobe of the cerebellum had a softened feel, and appeared to be in a state of disorganisation, especially about its centre. On further examination, it was found that nearly the whole of this lobe was the seat of a cavity filled with a sero-gelatinous fluid. The cavity had no lining membrane, but the sides, consisting of the substance of the cerebellum, were greatly softened.

The subject of the third case was a man, aged sixty-eight, who had through life, enjoyed a good state of health. He was suddenly seized with extreme vertigo, temporary insensibility, and vomiting. He retained perfect possession of his intellectual powers, and there was no paralysis. His restoration was partial and very gradual. About three months afterwards he was again seized with sickness and severe vertigo. He vomited the food which he had taken but a short time previously, and became extremely cold. There was no decidedly paralytic state, but a perfectly unsteady and unmanageable condition of the muscular powers. Six hours after the seizure he became insensible, and expired shortly afterwards. On a post-mortem examination, the cerebrum was generally in a healthy state. The branches of the basillary artery were in a decidedly morbid condition, having a thickened, opaque, or whitish brown appearance. The interior of each lobe of the cerebellum, into which the arterial branch passed, contained several dark-coloured coagula, one of which was contained in a distinct cyst. Around these coagula the structure of the cerebellum was in a softened state.

My limits will not permit me to indulge in comments, but yet I will venture on two brief observations. In the first place, I would remark that Mr Jackson's cases, so far as they go, illustrate and confirm, in a very interesting manner, the observations which numerous pathologists have made in reference to the functions of the cerebellum. It will have been remarked that in each case one of the most prominent and constant symptoms was extreme vertigo, whilst there was neither stupor nor general loss of sensibility. Now, Rolando observes, that in his experiments the diminution of the animal's movements was in a direct ratio to the lesion of the cerebellum—that stupor was never produced, nor the sensibility of any part of the body impaired, but that the power of the muscular movements was alone destroyed. Flourens, also, who may, perhaps, be regarded as the most extensive experimenter on the cerebellum, remarks that animals evinced no signs of sensibility during the removal of the cerebellum, and that when it was extirpated by successive layers, feebleness and a want of harmony in the muscular movements were the consequence. Now, this loss of control over the muscular motion was distinctly shown in the foregoing cases; in one instance we were distinctly told that the individual walked like a drunken man.

It will be recollected that in the system of Gall and Spurzheim, the cerebellum is regarded as the organ which gives rise to the sexual impulse. Much might be said on this subject from the records of pathological anatomy; but, as the topic was not even remotely alluded to in the cases which Mr. Jackson detailed, I shall pass it over without further notice.

The second observation I would venture to make is, that it behoves us to be very careful in deciding against the existence of organic disease, merely because the most prominent and urgent symptoms are not constantly present. In two of the three cases related by Mr. Jackson, the symptoms returned in distinct paroxysms, and sometimes the intervals were of considerable duration. Very extensive morbid changes may, moreover, occur in the cerebellum without being productive of anything like acute pain. Thus, Cruveilhier relates a case of a person, aged twenty-one, in whom two large tuberculous masses were found in the left lobe of the cerebellum, although the patient had never suffered from pain in the head. Numerous other examples might easily be adduced from the records of medical science, but my limits forbid me to enlarge.

Class III.—*Hæmorrhages.*—In this division I have only to notice two communications. The first was by Mr. Henry Jackson, who related a singular and interesting case of umbilical hæmorrhage. The case itself was of so practical a nature, that I shall, as concisely as possible, recount its peculiar character. The cord separated in the usual manner on the sixth day after birth. On the fourth day from the separation, after a severe fit of crying, hæmorrhage occurred from the umbilicus, and continued for twenty-nine hours, resisting all the means which were employed for its suppression. Pressure, flour, tinct. myrrh, tinct. ferri sesquichlor., cold water *guttatim*, and nitrate of silver, all successively failed to arrest the bleeding for more than a few minutes. The child being apparently at the point of death, it was determined, as a last resource, to apply a ligature, and on seizing the point, from which the blood flowed, with the forceps, the hold broke, and a small substance was found between the points, and appeared to be a small portion of the cord in a half putrid state. The hæmorrhage immediately ceased, and the child rallied in a short time. This case I believe to be unique in its kind, and certainly teaches a practical lesson of great importance to those who have the care of children during the first days of infancy. It also shows in what a surprising manner infants will sometimes rally from excessive discharges.

The second communication on the subject of hæmorrhage was read before the society by Dr. Shearman, of Rotherham, and was designated by him "A Peculiar Form of Uterine Hæmorrhage." The subject of his remarks was a lady, whom the doctor attended during her second accouchement. When he was called to her he found that the membranes had been spontaneously ruptured some hours previously—that the os uteri was dilated to about the size of a crown piece—that it was extremely rigid, and had the feel of being a fissure rather than a circular opening. The fingers of the child were protruding, and considerable hæmorrhage occurred with each pain. It was found to be impossible to dilate the os uteri, and, therefore, bleeding from the arm was resorted to, and a dose of

opium administered. Various other means were employed for the purpose of checking the hæmorrhage, but without being successful. At length, at Dr. Shearman's suggestion, another medical practitioner was called in, who also made an unsuccessful attempt to dilate the os uteri. It was subsequently discovered that the placenta was presenting, as well as the hand. It was not, however, till the fifth day that Dr. Shearman was able to dilate the os uteri, and turn the child. Delivery was then easily effected, and the patient ultimately recovered. Two years afterwards the Doctor attended the same lady, who had again placental presentation, excessive hæmorrhage, and the same hardened and fissure-like condition of the os uteri. In consequence of her excessively alarming condition, Dr. Shearman remained with her for a fortnight previous to her delivery. She ultimately recovered, and the Doctor had the satisfaction of attending her a third time with placental presentation. On both the former occasions the ergot of rye was given, immediately after the birth of the child, with the happiest effect. Dr. S. subsequently stated that an opportunity had been afforded him of examining the state of the os uteri of this patient when she was not pregnant, and that he then found it in the same hard and fissured condition as previously described. He also stated that her first labour was in every respect natural. In the conversation which afterwards took place, Mr. Turton contended that there was nothing peculiar in the hæmorrhage which occurred. He attributed it to the partial detachment of the placenta, and the hardness of the os uteri to chronic inflammation, of which it had been the seat subsequently to her first confinement. He further stated, that he had seen a case in which a similar condition of the os uteri terminated in scirrhus. It was further remarked by Mr. Jackson, that the thickness and rigidity of the os uteri are greater in premature labors, and cases of placental presentation, than where the labor takes place naturally at the full period of gestation. I shall only mention one other suggestion of a practical nature which was thrown out during the evening by Mr. Chesman—viz., that the application of the extract of belladonna is often extremely useful in lessening or removing abnormal rigidity of the os uteri.

Class IV.—*Action of Remedies.*—Under this general division I shall first take occasion to mention that, at the meeting held January 20, Mr. H. Jackson exhibited Duval's apparatus for applying hot air or steam to various parts of the body. The contrivance is ingenious, and the apparatus very portable. There can be do doubt of the great utility of the local application of steam in a great variety of cutaneous diseases, and it is much to be regretted that the remedy has been long and greatly neglected. When we reflect on the nature and variety of cutaneous diseases, and on the intimate sympathy which subsists between the skin and more remote organs, we are certainly justified in anticipating benefit from the employment of steam, not only when the skin is the seat of disease, but also when the morbid action is more deeply situated.

At a meeting held March 24, Mr. J. H. Smith read the particulars of a case of hemiplegia, in illustration of the *modus operandi* of strychnine. The patient was a female, aged thirty-eight, admitted into University College Hospital, under the care of Dr. A. T. Thompson, in March, 1838. Mr. Smith entered into a very minute detail of the symptoms, which, however, it is not needful for me to recapitulate. I shall only mention that the poor woman had been suffering from the loss of power of motion and sensation on the left half of the body for a period of two years before her admission into the hospital. After cupping and blistering the back of the neck, and exhibiting purgatives and the ioduret of mercury, Dr. Thompson put her on the use of strychnine, commencing with the exhibition of very small doses. She first took the tenth of a grain, and the dose was gradually increased up to the fifth of a grain. The effects which appeared to be first produced by the medicine were, numbness of the right arm and hand, with lividity of the fingers, slight twitchings both of the right and left side, and finally, tonic rigidity. The motor power of the affected side was in some degree improved, and the power of sensation was considerably increased. The precise degree of improvement which was effected in the common sensibility was ascertained by Mr. Smith, by employing a pair of compasses, and noticing the distances at which the points were first perceived to be double; the smaller the distance at which their plurality was perceived, the greater would the sensibility be reckoned.

This is a simple, and, for anything I know to the contrary, a novel method of ascertaining the gradually increasing sensibility of paralytic parts. Mr. Smith argued that the peculiar action of strychnine is first exerted on the sensitive nerves, proceeding from the spinal cord. Such is, perhaps, almost invariably the case when strychnine is exhibited. But it is remarkable that in nearly every case of paralysis in which there is lesion both of motion and sensibility, the sensation of the affected part returns before the power of motion. I have particularly observed this to be the case in my own practice, under all varieties of treatment. To those who have been in the habit of employing strychnine as a remedy in paralysis, the dose which was prescribed by Dr. Thompson will appear extremely small. For my own part, I rarely begin, in the case of adults, with less than the fourth of a grain. My own experience would certainly lead me to affirm that in the treatment of many cases of paralysis there can be no doubt of the value of the remedy under consideration. But I am of opinion that it is a dangerous medicine, and that unless the cases in which it is given be very nicely discriminated and carefully watched, much injury may result from its employment.

The only other communication on the action of remedies was on the ergot of rye, introduced by Mr. Favell. My present limits forbid me giving an outline of this paper. I will, however, remark, that it was an extremely elaborate one, and comprehended nearly everything which could be said either for or against the administration of the medicine in a great variety of diseases. But the points which were chiefly dwelt upon were, the power of the drug to induce uterine action, to prevent hæmorrhage after delivery, to ascertain whether any prejudicial effect was produced upon the child, and whether there are any distinctive characters by which the quality of the ergot may be at

once decided. The opinion of the writer was, that uterine action is frequently induced by the secale, and in this he was corroborated by all those who took part in the discussion. He likewise mentioned some cases in which he had administered the ergot immediately before the expulsion of the child, with a view of keeping up uterine action, and thus preventing hæmorrhage, in which decided benefit seemed to result. On this branch of the subject, also, the experience of others was in accordance with that of the writer. With respect to the influence of the medicine on the fœtus, Mr. Favell was of opinion that when it is judiciously employed it is not prejudicial, and he declared that he should be unwilling to use it for the future if any baneful effect could clearly be traced to it. I must, however, be permitted to question the propriety of forming any such determination, because, in the practice of our profession, we are frequently obliged to choose between two evils—no other course is left for us. Thus, in midwifery the life of the infant must occasionally be sacrificed, in order that the more valuable life of the mother may be preserved. Supposing, then, it were clearly established that the ergot is extensively destructive of fœtal life, there are, nevertheless, many cases from time to time occurring, in which its administration would not only be justifiable, but even imperatively demanded.

In connection with this subject I must mention a remark, of considerable interest and importance, made by Mr. Chesman. He stated that, during his attendance at the Dublin Lying-in Hospital, he had several opportunities of carefully examining the fœtal and maternal circulation during the exhibition of the ergot, and that the invariable effect was a gradual diminution of the force and frequency of the heart's action. Mr. Chesman stated that these observations exactly coincided with others which had been made by preceding resident pupils. I have designated this statement as interesting and important. It is interesting both in a physiological and therapeutic point of view, and it is of vast importance in its practical bearing. I would venture to remark, however, that the statement requires confirmation. I do not for a moment doubt the accuracy of Mr. Chesman's observations; but we we must not too hastily conclude that the remarkable alteration he perceived in the vigour of the maternal and fœtal circulation was induced by the medicine which had been administered. The "*post hoc ergo propter hoc*" method of ratiocination has heretofore been a great impediment to the scientific advancement of our profession. I would, however, take the liberty of suggesting to every one, who is in the habit of administering ergot of rye during parturition, the propriety of carefully examining the effect produced upon the maternal and fœtal circulation during its exhibition. The former can be ascertained with the greatest facility, and there are no difficulties connected with the atter to one who is conversant with the use of the stethoscope.

During the session two communications were read before the society, which I have not been able to classify. One of these consisted of some particulars of a case of steatomatous tumor, by Mr. Ray. The patient was a man seventy-nine years of age, and the tumor commenced its growth fourteen years ago. It has now attained a very considerable magnitude, but the age of the patient is of itself sufficient to preclude the idea of removing the morbid mass.

The last communication which I have to notice was one which was introduced at an early period of the session by the writer of the present address. The subject which engaged our attention was perforation of the stomach and bowels. The particulars of seven cases were briefly detailed, and gave rise to the following inferential remarks:—

1. That the same organic change may occur in different individuals without being productive of similar symptoms. This statement was illustrated by the cases which had been related, as well as by quotations from Dr. Griffin, Dr. Stokes, and Louis.

2. That serious organic lesions may exist without occasioning formidable symptoms. In some of the cases detailed, the patients had apparently been in perfect health till the very moment when the perforation occurred, although ulceration of the inner coats of the stomach must have been existing for a considerable period. In further illustration, a case recorded by Dr. Hastings was adduced, in which the whole stomach, with the exception of the cardiac extremity, was one mass of ulceration, and yet digestion was performed without inconvenience.

3. That the state of the alimentary canal ought to be most carefully watched during the continuance of fever. In one of the cases attended by the writer, perforation of the ileum occurred during the course of low typhus. In further illustration it was also stated, that in every case of low fever which Louis had an opportunity of examining after death, Peyer's glands were found to be more or less diseased. The most advanced patches of ulceration invariably occurred nearest the cœcum. Perforation occurred in about one-sixth of the cases he attended.

4. That when ulceration is progressing, nature often makes an effort to prevent the evil consequences of perforation by effecting an adhesion to some neighbouring part. This was illustrated by a reference to several cases.

5. That the treatment of perforation is extremely unsatisfactory, but the fatal event is invariably expedited by the abstraction of blood—a practice which is sometimes resorted to under the impression that the violent symptoms of which the patients complain are the consequence of simple inflammation.

6. That we must not hastily conclude against the existence of perforation of the stomach or bowels, merely because, on a post-mortem examination, the intestines are distended with flatus, since the whole of the gaseous matters by no means necessarily escape into the cavity of the peritoneum.

Such, then, is a brief, but at the same time as full, an account of the various communications which have been brought before the society during the past year as I have been able to prepare. A more extended notice would probably have been tedious, whilst one of greater brevity would necessarily have been uninteresting and uninstructive. My object has been to give a faithful epitome of the proceedings of the session—a true and simple record of our medical transactions.

But before I conclude I must briefly mention, that some new instruments and several morbid preparations have been exhibited at our meetings. I shall

merely recount them without making a single remark. The instruments introduced were the following:—

1. An improved aneurism needle, manufactured by Messrs. Hutchinson, of Sheffield.

2. A new Italian tourniquet, the object of which is to compress only the main trunk of the blood-vessels of the extremity without encircling the entire limb.

3. An improved patent truss, by the inventor, Mr. Alfred Greene.

The following morbid specimens were exhibited:—

1. The upper portion of the femur, the neck of which had been fractured five weeks previously, and in which there was no attempt at reunion, by Mr. Overend.

2. The heart of a child, in which the posterior inferior surface of the right ventricle was perforated—the pericardium was also perforated, and at the time of the post-mortem examination was filled with blood, as was also the right pleura; a needle, about an inch in length, and dark-coloured, was lying on the diaphragm, and had doubtless caused the perforations—by Mr. Overend.

3. Portion of the bone of the leg of a horse which had died of traumatic tetanus, by Mr. H. Jackson.

4. Necrosis and exostosis of the maxillary bone of a horse, resulting from a violent blow, by Mr. H. Taylor, V.S.

5. Lungs of a horse thickly studded with tubercles, by Mr. H. Taylor, V.S.

6. Fracture of several of the dorsal vertebræ, with considerable displacement, the consequence of a fall, by Mr. Thomas.

7. Bony tumor found in the pons Varolii of a female who died of puerperal convulsions, by Mr. Thomas.

8. Imperfectly closed foramen ovale, by Dr. Favell.

9. Scirrhous omentum, by Dr. Favell.

10. Perforation of the stomach, by Dr. Favell.

11. Medullary sarcoma of the uterus, by Dr. Favell.

12. Granular degeneration of the kidney, by Dr. Favell.

13. Tubercular liver, by Dr. Favell.

14. Extensive hypertrophy of the heart, with adhesion of the pericardium, and perforation of one of the semilunar valves of the aorta, by Dr. Favell.

15. The heart of a child, aged eight, in which there was only one ventricle; the foramen ovale was perfectly unclosed, and the septum of the heart was perforated by a large opening, which allowed the blood to pass from the left ventricle into the commencement of the pulmonary artery, by Dr. Favell.

16. Portion of the intestine of a child, the serous coat of which was thickly studded with tubercles, by Dr. Favell.

I must further observe that, during the session, Mr. H. Jackson placed on the table some drawings of morbid parts under his care at the infirmary, and also several rare and interesting medical works.

It is almost superfluous for me, in conclusion, to remark that the communications, the discussions, and the number and variety of the exhibitions which have been introduced during the session, have greatly exceeded the expectation of those who were the founders of the society. We may look back upon the past with perfect satisfaction, and it certainly is not the least pleasing part of our retrospect to be able to assert that, during the entire session, not one unkind word, not a single harsh phrase, not a single sentiment has been uttered which could possibly occasion pain or uneasiness to the most delicate and sensitive mind. I will only add the expression of my fervent hope, that, when we meet again, it may be in the same kindliness of spirit, with similar animating zeal, and with the same single aim, not to minister to our individual selfishness, but to contribute our share towards the scientific advancement of our common profession.

CASE OF FRACTURE OF THE FIFTH AND SIXTH CERVICAL VERTEBRÆ.

By Alfred Baker, Esq.

[Read before the Pathological Society of Birmingham.]

William Bache, a robust, florid, muscular, and well developed carpenter, a single man, was brought to the hospital on the 23rd of April, 1842, at half past eleven, a.m., in consequence of his having fallen from the kitchen into the cellar of a house where he was at work. He states that he fell head foremost, and was found lying with his head downwards. The height was about seven feet, and the accident occurred a quarter of an hour ago.

Present State.—He complains of severe pain in the back of the neck, which is much aggravated by the motions of the head, and by raising him into the semi-erect posture. The neck is swollen, especially on either side of the spinal column, and a crepitation, like that from a synovial fluid is distinguishable here on flexing the head. Another crepitus, more like that of bone, is perceived just over the fifth and sixth cervical spines, whilst performing the same movements; but I could not positively grasp and localise any movable portion. He has headache; his pupils are of moderate size and activity; he has a total abolition of motion and sensitive power in the lower extremities and abdomen, and these parts may be pinched without his being cognisant of the act. Upon tickling the soles, one or two of the toes were slightly flexed, but the spasm ceased immediately; his penis is in a state of rigid priapism, but is quite devoid of sensation; the upper extremities are also paralysed, but the sensitive fibres of the nerves have sustained more injury than the motor, since he can raise the limbs, whilst he complains of want of feeling and numbness in them, and does not suffer from pinching; he has also shortness of breath, but his voice is sonorous; has dull aching pain in both eyebrows and in the forehead; pain in neck, and upper part of shoulders, increased by moving his body. The priapism lasted about three hours, since which time it has been less marked, the organ being semi-erect and tumid; the scrotum is injected. The bowels have been moved twice by an enema, but he has voided no urine, and the hypogastrium is swollen and tense; the conjunctivæ are injected; the face is deeply-coloured; lips dry; he is thirsty; has a whitish and moist tongue, which he protrudes in the median line; his eyesight and hearing are acute. Nearly three pints of urine were drawn off by the catheter.

24. Had very little sleep, and lies upon his right side, in which posture he is more easy than when

supine, when he feels pain in the neck; his face is ruddy, and does not express pain; his respiration is not so laboured; the abdominal muscles are raised and depressed whilst breathing, but this arises probably from the mere depression and elevation of the diaphragm in these acts; his voice is still loud; pulse soft, distinct, and 66 per minute; skin warm and moist; the lower extremities and trunk are still quite paralysed, but he retains sufficient sensation to distinguish between warmth and cold, being cognisant of the warmth of some water used to wash his feet this morning, at the same time he is insensible to pinching; the penis remains swollen and semi-erect; he has more sensation in the upper extremities; is aware when either thumb is pinched, but if the fingers be grasped, says he feels something in the middle of his arm; his urine is still retained and has been drawn off by a catheter; his bowels also have been slightly moved without volition or cognisance.

20. Sleeps but little, and seems to be gradually sinking; his intellectual faculties remain unimpaired; pulse 80, soft and feeble; skin warm; breathing more difficult, irregular, and hurried; his voice is to day less sonorous; takes very little food; the paralysed parts seem to be in the same condition.

27. Is evidently sinking; his face is tumid and purple; pupils small and active; senses perfect and intellect clear; voice weaker; respiration laborious, irregular, and attended with loud, coarse tracheal, and bronchial rattles; pulse 76; palsy increased; has passed a stool unconsciously with a little urine having an ammoniacal odour.

28. Passed a restless night, dyspnœa being severe; he rallied for an hour this morning, but soon became worse, and expired at ten, a.m., having continued intelligent to the last.

Sectio Cadaveris, Forty-eight Hours after Death.

Head.—Meninges healthy; no unusual injection of the vessels of the pia mater; brain itself of good consistence, though somewhat congested; the ventricles were all normal; they contained each one ounce of bloody serum, the results probably of transudation after death; the posterior lobes of the brain were more congested than the anterior; the velum interpositum and choroid plexuses were somewhat turgid, but the sinuses were not engorged; the skull itself had sustained no appreciable injury.

Spine.—The vertebræ, when the subject was laid on the belly, and the dorsal muscles detached, were found to be on a natural and equal plane, and there was no divergence from the median line; the fifth and sixth cervical vertebræ, when grasped, were found fractured on both sides of the arch, near the point where the laminæ unite with the oblique processes, but the fragments were not completely detached, the periosteum not being torn quite through, so that no displacement occurred. The body of the fifth, when the chord was removed, was seen to be broken through in the centre, but here also the cleavage was incomplete, and the ligaments, not being lacerated, no displacement had resulted; a quantity of dark coloured fluid blood surrounded the investments of the spinal chord in the lumbar and cervical regions, and the membranes were stained in the other parts, as though the blood had gravitated from above; the membranes had suffered no laceration, but at the point opposite the injured vertebræ the chord seemed bulging, and enlarged more than is usual, and the cellular membrane next to the sheath was infiltrated with blood. These membranes exhibited no traces of inflammatory action; the pia mater was somewhat congested below the seat of injury; when the membranes were divided, and the spinal medulla cut open, it was seen to have a normal appearance, both above and below the expanded portion, its colour being natural and its consistence firm; that part, however, corresponding to the fifth and sixth cervical vertebræ was soft, creamy, almost diffluent, and had a purplish red colour, of different depths in different portions; at first sight, the whole of this had a confused look, as though the whole substance of the medulla had been disintegrated by sanguineous effusion, and was mixed and blended with it, but upon careful examination, a few fibres of the chord on its external and posterior surface might be traced onwards, as though maintaining continuity between the upper and lower segments, but even here, small maculæ of red colour might be discovered, interrupting and breaking the white colour; at one or two points, clots of blood distinctly separable from the medullary matter were visible; the whole morbid space was tolerably defined in its boundaries; a small coagulum was also found exteriorly within the arachnoid cavity, embracing the roots of one of the left dorsal (first) nerves immediately below the seat of injury; the medulla oblongata and nerves arising from it presented no abnormal appearances.

ENCYSTED URINARY CALCULUS IN A CHILD.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN, — If you think the following case worthy of being recorded in your useful periodical, it will much oblige

Yours, faithfully,

JAMES THEODORICK VALE, M.R.C.S.L.

Birkenhead, Cheshire, June 16, 1842.

B., a healthy-looking girl, about three years and a half old, has suffered nearly twelve months with a frequent disposition to urinate, accompanied with pain in voiding it, which was increased when the bladder was empty; bowels often in a disturbed state; prolapsus ani generally occurs when the bowels are acted on; she never takes any exercise, or plays with her companions; the fingers of one hand are constantly applied to the genital organs, the seat of her sufferings being at the end of the urethra; there is seldom any alleviation from pain, excepting when nursed on her mother's knee, or rocking herself in a chair, in which she sits the greater part of the day; there is sometimes incontinence of urine, which exhales a strong, offensive, alkaline odour, destroying the linen and bed-clothes; no blood passes from the viscus, but the urine is occasionally turbid. On sounding the bladder, a stone was instantly struck, emitting a peculiar dull sound.

May 5. In the presence of a few medical friends, a small dilator oris was insinuated into the meatus

urinarius, and dilatation employed for a few minutes, when the urethra was slightly divided with a narrow bistoury through its mucous membrane only, upwards and outwards on each side, and the dilatation was then cautiously continued for about a quarter of an hour, until the little finger could be introduced into the urethra. The finger being carried up to the fundus of the bladder, the end of a calculus was felt, apparently suspended pendulously from that part of the organ over the pubes. The finger being withdrawn, and the forceps introduced, the stone, with a little difficulty, was seized; on endeavouring to remove it the forceps slipped off, from the resistance of the stone, it appearing fixed into the bladder. More traction and pressure with the forceps were then had recourse to, which brought away a few fragments of the concretion between its blades, of a light clay colour, showing the stone to consist of the triple phosphate. The index finger of the left hand was introduced into the rectum, and directed as high as possible towards the fundus of the bladder, while the little finger of the right hand was retained within that organ, where the stone could be felt through its parietes. The form and position of the calculus occasioning this embarrassment were then more clearly ascertained, by bringing it thus between the little finger of one hand and the forefinger of the other. There appeared to be at least four-fifths of the stone (the size of a very large gooseberry) lodged in a cyst external to the general cavity of the vesical organ. The projecting portion, apparently peeping into the bladder, was again seized with a strong pair of polypus forceps, while the finger in the bowel was made to bear on the stone in the direction of the urethra, and traction again employed, simultaneously with rotation, as far as was considered prudent, with the hope of loosening its connections, and drawing it through the neck of the cyst. The laceration of this part of the obstruction was fruitlessly attempted. It was then considered prudent to nip off as much calculous matter as could be readily accomplished; this being done, the child was put to bed. She rested better the following night than she had for many weeks, and there has been a mitigation of all the symptoms since the operation, excepting the prolapsus ani, which still causes the child a good deal of inconvenience when its bowels are opened. Partial incontinence of urine still exists; sometimes the bladder retains its contents for the space of two or three hours.

The infrequency of stone in the female bladder, at the age of this little sufferer, with its attendant peculiarities, makes it, I conceive, a case of some interest. A case related in one of the weekly journals—I think the "Lancet"—of stone found lodged in the urethra of a girl about five years of age, which was readily removed, is the only case I have heard of so young. Cysts in the bladder, containing one or more stones, have commonly been attributed to disease of that organ; in this case the bladder was in every respect healthy. Whether the cyst was formed previous to the deposition of the calculous matter into it, or the stone gained during its development a close covering by an extension of the coats of the bladder, must yet be a subject of conjecture; the latter I presume to be the most probable. Various plans have been proposed for the removal of stones from their cysts—dilating the mouth of the cyst with a probe, crushing the neck of the cyst with forceps, dividing the constriction with a shielded bistoury, or a pair of scissors introduced into the bladder, dragging and twisting the stone, when seized, until its connections gave way. Desault, it is said (by Cooper), employed with success a concealed knife, called a *coupe bride*, by which he opened the cyst. The next analagous case to the one above related is mentioned by Sir Benjamin Brodie (with whom I have the honour of corresponding upon this case), in his work on Diseases of the Urinary Organs, of a boy sixteen years of age, where the bladder contained a cyst with a stone in it; by means of a probe-pointed bistoury the orifice was carefully dilated, so as to admit of the removal of the calculus. The difficulties attending this operation on so young a female were the want of space, the natural opening of the urethra being the only way of access to the bladder, the interposed vagina limiting the size of the required opening, so that the finger could not be used in conjunction with any other instrument for the various manipulations in this peculiar case.

TRAUMATIC PNEUMATOSIS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you think the following case of "pneumatosis traumatica" sufficiently interesting, I beg you will insert it in your Journal.

I am, Gentlemen,
Yours obediently,
EDWARD R. JONES.

Colchester, June 20, 1842.

May 15, 1839. J. Armstrong, aged 15, was working at his usual employ in a mining district, when of a sudden the support to the roof of the pit gave way, and covered him with nearly a ton of earth. By prompt assistance, he was extricated, and I was immediately in attendance. I found him sensible; complaining of a grating sensation on the right side of thorax, with occasional vomiting of blood and frothy matter. On examination, I found that the fourth and fifth ribs were fractured; when moved giving an unusual crepitus. Twelve ounces of blood were drawn from the arm; after applying a soap plaster, compress and bandage were also applied in the usual manner; he was ordered to keep the horizontal position, and to have four grains of calomel, with six of jalap, at once.

Nitrate of potass, one drachm;
Spirit of nitrous æther, one drachm and a half;
Tincture of digitalis, one drachm;
Tincture of opium, half a drachm;
Water, to make up eight ounces. Two tablespoonfuls every third hour.

In the evening, six hours from the above, he was visited again. Pulse 90; bowels not open; difficulty of breathing; vomiting of blood in small quantities. He was again bled to ten ounces, and ordered, four grains of Dover's powder, with six of rhubarb, to be taken at night.

16. I called at four, a.m., and found that he was labouring under an emphysematous swelling, about two

inches below the fractured fifth rib, which I was informed had taken place very suddenly; inspiration easier; pulse 80; an evacuation of the bowels, tinged with blood. A bandage was applied over the abdomen, with orders, if the difficulty of breathing became violent, to ease it.

Ten, a.m. The diffusion of air in the cellular substance covered the whole body; bowels not again relieved; pulse 85; very thirsty, and other feverish symptoms; feels easier in an upright position than in the horizontal; complains of pain over the os frontis; slight sediment in urine, but not much coloured. Bled to twelve ounces; continue mixture, with half an ounce of castor oil, in three hours, if the bowels are not open.

Eight, a.m. The emphysema increasing; severe pain in the head; pulse 60; inspiration painful; a cold perspiration at times shows itself; the bowels opened, slightly tinged with blood; vomiting ceased; delirious at times; the patient appeared to be in a sinking state. Continue mixture, with night powder; cold lotions applied to the head.

17. The emphysema not decreased; pulse 70; complains of great tightness across the thorax. The legs were bandaged from the plalanges to the ileum, so that gentle pressure might be applied to nearly the whole body; he experienced great relief in a short time from this plan. Continue mixture.

18. Much relieved; great part of swelling subsided; bowels obstinate; pulse 65; head much better. Ordered

Cathartic mixture, one ounce and a half;
Jalap, two scruples;
Mint water, to make four ounces. A fourth part every four hours.

19 and 21. Rapidly recovering; the emphysema quite disappeared; bowels regular; pulse 64.

28. I saw the boy to-day; he was walking about his room, and does not complain of any uneasiness but at the part where the fractures occurred.

The above case would lead us to imagine that a spicula of the fractured rib had punctured the vesicles of the lung at the moment he was covered with the earth, and that in consequence of his necessary removal a portion of the pleura costalis must have overlapped the puncture, and thus prevented at the moment the diffusion of air in the tissue. I have tried the above plan (recommended by Mr. Abernethy) in many cases since the above, and find it succeed far beyond what one could imagine.

VACCINATION DEFENDED AGAINST THE ATTACKS OF MR. BROWN.

Letter VI.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The subject of Mr. Brown's 6th letter, re-vaccination, need not detain us long, because it has been already discussed in my paper on that subject, read at York, and published in your Journal for August 28, 1841.

It does, however, surprise me that any philosopher should consider re-vaccination as "evidently an expedient that most naturally occurred to every one who had met with cases of small-pox succeeding to vaccination." On the contrary, it appears to me to be a most unnatural occurrence; for if the vaccine be, as it is acknowledged to be, a specific malady, it must exert a specific influence upon the constitution, and, according to all sound reasoning, this influence will not cease, nor will it be capable of renewal, except in the small number of cases which form the exception to, and therefore confirm the general rule.

It is truly astonishing to find Dr. Gregory, as quoted by Mr. Brown, giving the authority of his name and influence to the unscientific expedient of re-vaccination, and to find that he considers, where it is successful, the individual has opened a new policy of vaccine insurance. It is very lamentable that such statements should go forth to the world under such sanction, whereas it is impossible to reproduce the vaccine unless as cases of exception to the general rule, and the security is not increased by this recurrence; for if the vaccine do not preserve the constitution from itself, how can it secure that constitution from its analogous and more formidable malady? "If re-vaccination produce a full eight day pock with the areola, it stands *loco primæ vaccinæ* (we conclude the terms here used "prima vaccina" must be a typographical error), because, in point of fact, it is a first vaccination, and occurs only where an attempted first vaccination has been imperfect, or in the case of exception to the rule. And where no effect, or a local effect only is produced, the result of an animal poison introduced into a system incapable of receiving a constitutional influence, nothing is gained by re-vaccination. The individual remains in statu quo ante re-vaccination"—that is, re-vaccination, at least, is only a test of the perfection or imperfection of the preceding process, is therefore useless, and tends to unsettle the mind, and destroy confidence in the protective influence of vaccination.

Then comes the question, "Is it desirable to expose children after vaccination to the infection of small-pox rather than to keep them away from it?" This question should be answered on general principles. It is undesirable to expose children, under any circumstances, within the sphere of infectious malady, although they may have been previously the subjects of that malady. Therefore, it is undesirable to expose vaccinated children to the infection of small-pox; in fact, they should neither be wantonly exposed, nor sedulously guarded from exposure. All that should be done is to perfect the vaccine process, and then for children and adults to go about without fear, well assured that they possess the best possible (though not an absolute) security against the malignancy of small-pox.

It is not my intention to enter into the question of the identity of small-pox and cow-pox; but I shall here quote one passage from my communication of last July. "Admitting the force of Mr. Ceely's facts, I am anxious to draw your attention to a series of counter facts, not for the purpose of throwing discredit upon the former, but only in the hope of securing yet more attention to the subject, in the expectation of arriving at the whole truth, the only point on which the scientific mind can rest in peace.

"This series of facts consists in the different periods of incubation required for the two maladies—in the

marked difference of the origin, progress, maturity, decline, and termination of the respective vesicles—in the total difference of the cicatrix—in the constitutional influence produced by the mildest case of small-pox, and the severest case of cow-pox—in the differing degree of after susceptibility to the contagion of small-pox, and in the apparent impossibility of communicating vaccination to one who has previously undergone variola. With regard to the latter fact, I speak hesitatingly; I have not been able to effect it, but my number of experiments has not been sufficiently large to enable me to speak positively."—*Journal*, Vol. II., p. 433.

But why mix up with this question the doubts, the errors, the exploded hypotheses, the unproved theories of Jenner, the discoverer, or any of the subsequent advocates of vaccination? Why not treat it as a simple practical question, with its simple practical bearing on human health? Simply, because this would not be suitable to the enemies of vaccination; to them a cloud of adventitious vapour is desirable, because, by its means the practical facts are rendered undefined in their outline and uncertain in their tendency.

We pass over the authorities of some persons of whom the world never heard, such as Bandoloque, Sidellot, and others (can these be Baudelocque, Sedillot, &c.?) for the purpose of stating, in Mr. Brown's own words, "the question stands thus: If the number of deaths which now occur in cases of small-pox after vaccination exceeds that which followed from inoculation (a practice leaving no doubt or anxiety concerning future safety), and the other material consideration, of the very great increase of epidemic small-pox, and the utter improbability of extirpating that dreadful disease, it is impossible to discern its merits."

But if, as we affirm, vaccination affords in the greater number of instances perfect immunity from small-pox—if, in the admitted cases of failure from perfect security, the subsequent attack of small-pox is comparatively mild, and the number of deaths infinitely less than after inoculated small-pox—if the number of these instances of failure has been augmented by careless and imperfect vaccination, and might, therefore, be incalculably diminished by greater care and a more perfect process—if, still further, the instances of death from small-pox after vaccination are infinitely fewer than in secondary small-pox—if, therefore, the security afforded to the patient is greater than he could obtain by inoculation from the malignancy of small-pox—if the universal diffusion of vaccination should leave very few subjects for the agency of small-pox epidemics—and if, therefore, by the universality of this perfected process, we might entertain a reasonable hope of the all-but extermination of that dreadful disease—surely it is impossible not to discern its infinite merits—surely it is absurd to decry those advantages—surely it is unphilosophical to proclaim its imperfections, rather than quietly and unostentatiously seek to remove its defects and to perfect its excellencies. Yet such we unhesitatingly affirm to be the true position of vaccination.

Mr. Brown shows the inutility of re-vaccination; but it is rather too bad to draw inferences against vaccination, and to pronounce it "unworthy of the confidence of any reasonable being," because an unphilosophic effect from it—the offspring of some perverted imagination—is shown to have no foundation in reason or common sense.

The subject of the next letter, retro-vaccination, need not detain us long, firmly believing, as we do, that the vaccine vesicle of 1842, if handed down in unbroken succession from the vaccine vesicle of 1800, is identically the same; and if once and always perfect when propagated, maintains its attribute of perfection still; and, moreover, that it cannot be improved or rendered more perfect by going back to the cow for a supply of lymph.

Mr. Brown goes on to inquire what truth there is in the opinion of the National Vaccine Establishment, "that the vaccine lymph, as employed by Jenner, is perfectly free from all objections, and requires no expedient to be practised, as increasing its power, in giving protection against small-pox."

Now, this observation is eminently practical—the result of very large experience—how does Mr. Brown meet it? Not by any practical facts, but by holding up some of the early opinions of Jenner and his friends as having been erroneous and abandoned. But to oppose the result of the experience of thirty or forty years, by the speculative and hypothetical errors and the immature judgments of the discoverer and early friends of vaccination, is surely neither candid nor correct in the inquirer after truth; and we may safely leave the two assertions to their relative logical and philosophical value. It is, however, always to be regretted, when in argumentative discussion either party has recourse to sophistical reasoning.

I purposely pass over the several modes of origin of cow-pox, because I think these are not now the question. The question is not as to the mode in which it has been originally produced in the cow, but is it the best known preservative against the malignity of small-pox? and can the process be rendered more perfect and less liable to failure by increased attention and observation? To both of these inquiries we unhesitatingly answer in the affirmative.

In a subsequent page Mr. Brown admits, when his wish is to combat the idea of the identity of small-pox and cow-pox, that the latter "neutralises" the former "in the same way as an acid does an alkali," or by producing a distinct constitutional influence similar to the other exanthemata. What more can we want? All we ask for is granted, and more than all; for we admit the occasional failure of vaccination, whereas the neutral salt remains a neutral salt except by the introduction of new disturbing affinities; and the general result of the exanthemata is that of freedom from a subsequent attack. We ask no more; according to Mr. Brown's own showing, the vaccine affords as good a protection against small-pox as measles or scarlatina against a subsequent attack of the same malady.

"*Fas est et ab hoste doceri.*" We conclude, then, that (to transform the words of Mr. Brown) such is the contradictory and confused state of the objections against vaccination, and such the clear and satisfactory amount of evidence in favour of its being the best known preservative against the malignity of small-pox, that it will be found ultimately to triumph over all opposition; and that, under such circumstances, it must be deeply criminal in any medical person to

inoculate for the small-pox; and that, for the reasons stated in a former letter, it can be scarcely less criminal to employ small-pox inoculation as a test of security in those who have been previously vaccinated, at least, until a greater degree of attention to the vaccine has been exerted both amongst patients and practitioners.

What, then, is the duty of the medical profession under the admitted defects of the vaccine process?

Taking up Mr. Brown's own answer to his own question, I should distinctly declare that it is quite impossible for any respectable member of the medical profession, possessing a mind alive to all the miseries involved by small-pox, even in its mildest form, to do otherwise than cordially recommend the extension of vaccination to the utmost of his power—with his utmost energies to discountenance inoculation for small-pox—to refuse at all hazards to become a party to so iniquitous a proceeding—and to endeavour, by greater care and attention, to diminish the number of failures of perfect vaccination—and then we may confidently hope that the failures of perfect immunity from small-pox will go on decreasing till they shall be placed upon a level as to numbers with the failures of small-pox, and upon a pinnacle of unapproachable superiority as to the result of such few and distant failures; while in the same proportion the origin of endemic and the spread of epidemic small-pox will be confined within the narrowest limits, because there will be no subjects (or very few) impressible to the one or the other mode of attack.

Such, then, gentlemen, appears to be the real state of the vaccine question at the present moment, and such the paramount duty of the profession at large.

It remains for me only to thank yourself and your readers for the patience with which they have borne my communications, and to remain

Faithfully yours,

W. Newnham.

Farnham, June, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JUNE 25, 1842.

The condition of medical affairs in this country must indeed be in a pitiable state of confusion, since it has converted the Somerset-house commission into advocates for medical reform. The conflicting claims of the nineteen licensing bodies have completely bewildered the poor-law commissioners, and after unavailing endeavours to satisfy all parties, even *they* are forced to exclaim "that the present state of the law with respect to the licensing of medical practitioners is unsatisfactory, fraught with inconveniences and injustice, and only to be remedied by a legislative revision of the present law and the establishment of a uniform medical qualification, extending over the whole of the United Kingdom."

We have quoted the words of the commissioners from their minute of May 30. They are decisive of the absolute and pressing necessity of medical reform, for no one can accuse the commissioners of any undue tendency to liberal measures, or of any overweening desire to improve the moral or material condition of the medical practitioners of these realms.

That the day of account is fast approaching, may likewise be gathered from the unusual activity of the corporate bodies and the spirit of self-reform with which they have been—in this the eleventh hour—unanimously seized.

But that which is most calculated to support the true friends of medical reform in their long and arduous struggle—to stimulate the zeal of the lukewarm—rally round our standard the timid—and paralyse the disaffected—is the fact that the most distinguished ornaments of our profession are prepared to do battle with us in the good cause, and that we now count amongst our leaders men of the highest station and purest character.

The names of Carmichael and Macartney, of Barlow and Kidd, of Forbes and Clark, have been successively enrolled amongst our ranks; to those names we may confidently refer as proof of the just and temperate nature of our demands, and with the assistance of such men we may confidently look forward to the ultimate success of our efforts.

The subject of medical reform and the preceding reflections have been suggested by the perusal of a letter, entitled, "Remarks on Medical Reform," recently addressed by Sir James Clark to Sir James Graham.

We earnestly recommend the observations of Sir James Clark to the serious attention of all who are interested in the regeneration of the medical profession—to the public, whom the matter vitally concerns—to medical men—to the executive government. The opinions of Sir James Clark are especially entitled to our notice, not only in consideration of his station, but of his having ever been a firm and moderate advocate of reform; and we therefore gladly seize the present opportunity of giving a rapid and extensive circulation to his views, the details of which will be learned more completely from a perusal of the letter itself.

Sir James Clark first alludes to the well-known, but hitherto unexplained fact, that in the plan of medical reform now under the consideration of government, the members of the medical corporations alone have been consulted. These gentlemen, as might be expected, are strenuously exerting themselves to obtain all they can—each for his own institution—while the claims and feelings of the great body of the profession seem likely to be lost sight of.

This is a fatal error. Reform—if any reform we are to have—should be granted for the benefit of the many, not of the few; for the purpose of satisfying the just demands of the general practitioner, not of

perpetuating the monopolies, lawful or usurped, of a few individual physicians and surgeons who are pleased to call themselves pure. To confound the self-reform of the medical corporations with medical reform is a mockery, of which the perpetrators must ultimately repent. The one regards certain privileges of a few persons residing in the metropolis, concerning which nine-tenths of the profession are utterly indifferent; the other comprehends the well-being of an immense majority of medical practitioners, their public estimation, and their personal weal. No scheme of medical reform, therefore (as Sir J. Clark justly observes), which does not include *all* legal practitioners of medicine, can prove satisfactory to the profession and the public. Partial legislation may for a time appease the present clamour, the troubled waters may become calm for a season, but unless the measures which are adopted be of extensive application, and relieve the real grievances of the profession, the discontent which only slumbered will break forth with increased violence, and the results will fall heavily on those who, when we asked for the substance, mocked us with the shadow of reform.

One of the first elements, then, of sound and lasting reform is, that it should be universal; in other words, that it should comprehend the whole body of the profession. To the great majority of medical men—and still less to the public—it is a matter of comparative indifference whether the title of "licentiate" be abolished, or the election of the council of the College of Surgeons be entrusted to 200 or 2,000 members. What the public require is, an uniform and complete qualification of all persons entering the medical profession; what the great mass of the profession demand is, that they should be united into one body, with uniformity of education and equality of privileges.

These views are ably developed by Sir James Clark. He shows distinctly (what, indeed, few now venture to deny) that the separation of medicine from surgery is absurd and injurious; absurd, because they form parts of the same healing art, and are indivisible in practice; injurious, because such artificial distinction tends to limit knowledge, and produce a class of half-educated practitioners.

The first and most essential step, then, in medical reform is (according to Sir James Clark) the establishment of a good and uniform education for the general practitioner; and every one, on entering into the profession, should qualify for the duties of this degree. Upon this point we believe that all shades of medical reformers are fully agreed.

Having passed through the preliminary examination, Sir James proposes that the general practitioner, after an additional period of study, and submitting to the prescribed tests, should be eligible to another degree of a higher class, from which physicians and surgeons to hospitals, lecturers, examiners, &c., might be chosen.

To this plan the old objection, of "creating different classes in the profession," may be offered; but the objection is, we believe, more apparent than real. Sir James Clark obviates it in the following passages:—

"As by this regulation all would pass through the first degree, so all would be eligible for the second or higher degree, by devoting an additional period to acquiring a practical knowledge of their profession, and submitting to the prescribed tests. Such a regulation would, at once, do away with all just cause of jealousy between the two grades of the profession, while the knowledge that at any future period he might take the higher degree, would prove a powerful stimulus to the general practitioner to keep up his knowledge with the progress of medical science. This relation of the two grades of medical practitioners being established, there could be no good reason why men so closely connected by education, and so intimately associated in the exercise of their profession, should be ranged in different institutions. It is surely more natural, and would, I think, be infinitely more beneficial to the profession, that the whole should be included in one institution. Make two classes of members in the united body. Let those who take the higher degree constitute the fellows, and be alone eligible as officers for conducting the affairs of the corporation; while the general practitioners, or bachelors of medicine, would constitute the great body of members, and have, under such regulations as upon consideration might be deemed proper, a vote in the election of the officers. As this rule would apply to all, and the fellowship would be open to every member of the body who chose to qualify himself for it by taking the higher degree, no one could complain of being excluded from the fellowship.

The whole profession would thus be united into one body, while the present distinction of physician, surgeon, and general practitioner, would be maintained. All just cause for the discontent at present existing in the profession would be removed. The 'one faculty' and 'representative' system would be realised, without in the least degree interfering with the present distinctions; such distinctions, on the contrary, would be established upon the only legitimate ground—that of more extended acquirements.

That such a scheme of medical reform would prove most beneficial to the profession generally, cannot, I think, admit of doubt. It would secure a good and uniform education to every member of the profession; it would knit the whole in one bond of union, and by opening to every member who chose to qualify himself the highest degree in the profession and the highest offices in the body corporate, it could not fail to raise the character of the whole. It would elevate the general practitioner in his own estimation, and in that of the public. The public would know that every member of this body must have had a good education; while the practitioner himself would feel that he formed an integral part of the great body of his profession, the highest honours and offices of which he might attain by qualifying himself for them, and by conducting himself as becomes the member of an honourable profession."

Having stated the principles on which a sound medical reform ought to be grounded, Sir James Clark explains briefly how the arrangement of the profession, which he has suggested, may be accomplished.

His plan does not differ materially from that proposed by Dr. Kidd, and many other eminent writers on the subject of medical reform. In each of the three divisions of the United Kingdom should be established *one* board for examining, licensing, and granting degrees to all medical practitioners. The board should be a mixed one, composed of men of general science and literature as well as medical men. Sir James informs us that, under a more efficient constitution, the London University might furnish such a board; but he has no special preference for the university, further than as an institution already in operation. Similar boards should be established in Dublin and Edinburgh, with which, perhaps, the universities already existing in those capitals might be connected. The Colleges of Physicians and Surgeons might furnish the medical members. As the education and tests of proficiency would be the same in the three kingdoms, all members would enjoy equal privileges.

"In addition to the three examining bodies, or universities, a central board would probably be necessary for fixing and assimilating the course of education, preliminary and medical, and for making such changes in the subjects of study, and mode of examining, &c., as may become necessary in the progress of science."

It cannot have escaped the notice of our readers that in this plan the existence of the Apothecaries' Company is totally overlooked. Sir James Clark, like Dr. Kidd, Mr. Carmichael, and every other writer on medical reform, would leave the Company to their fate; "It would naturally cease to exist (says Sir James) as a separate institution, its members being incorporated in the united body of the profession."

We do not know how far the Company may be pleased with this prospect of a "natural" death, but we opine that they must submit to it quietly, unless, perchance, they prefer a "violent" death. Upon the question of chemists and druggists, Sir James Clark expresses himself in a cautious manner; he would require some preliminary education, and practical examination regarding their knowledge of drugs and pharmaceutical chemistry.

The thorny point of the suppression of illegal practitioners and quacks is alluded to in the following passage:—"Deny the rights and privileges of professional men to all but regularly qualified and licensed practitioners, and quackery may be left to its fate."

Upon this point we regret that we are compelled to differ, *toto cœlo*, from the high authority of Sir James Clark. *We*, who speak chiefly in the name of the general practitioners of this country, affirm that the suppression of illegal practitioners is a capital, and, to them, a deeply important point of medical reform.

Sir James Clark and those like him, who are "clothed in fine linen, and fare sumptuously every day," may well afford to disregard the encroachments of illegal practitioners; not so the surgeon whose fate has thrown him amongst the poorer classes of the people in crowded districts; by him, and by him alone, are the evils arising from the practice of medicine by unqualified persons severely felt. He has spent his moderate fortune and the best years of his life in the acquirement of knowledge, yet are the fruits of his labour suddenly snatched from him by some pretender, emerged from a grocer's shop, and self-styled "surgeon and chemist."

Quackery, gross, unsophisticated quackery, which acts on the superstitious with its spells and charms, may safely be left to its fate; but we cannot tolerate the wolf amongst us under the guise of the lamb.

It is impossible for the general practitioner to compete much longer against the encroachments of chemists, druggists, and other intruders of the same kind. If the privileges of the Apothecaries' Company be abolished under the government bill, or any other measure of medical reform which may be introduced without a protective clause, one of the first effects of such a measure will be to let loose upon the poorer classes of society a host of uneducated persons, who even now claim a *right* to practice medicine in minor cases; from the minor to the major is but a small step in the conscience of a chemist.

What we now say we say advisedly, and we earnestly trust that the interests of our professional brethren, and the public health, may not be sacrificed to nice theories or scruples of non-interference. The experience of what has occurred in Ireland within the last few years can scarcely have been forgotten. What has happened in the sister country must take place here under similar circumstances. The chemists and druggists, who now practise medicine in spite of the law, and without education, will gradually assume the rank of medical practitioners of an inferior class. The institution of the Pharmaceutical Society is admirably fitted to produce this effect. Lectures may be delivered on anatomy, surgery, and the rudiments of the practice of physic; certificates may be granted; the diploma of the society may easily be converted into a medical degree—in a word, after a few short years, we may, and probably will, have a manufacture of *mediculi* in Bloomsbury-square, by whom the theory of equal qualification, equality of privileges, and the representative principle will be sorely damaged. The whole question of medical reform will thus be opened afresh; the mantle of the departed apothecary will be found to have fallen upon one who will not consent to die a "natural death" with the same resignation;

in a word, our union will turn out to be a vain dream, and our reform but the shadow of a shade.

This, we repeat, is the only point upon which we differ from Sir James Clark; it may be a minor one, but it is intimately connected with the existence of a class of honourable, industrious, and intelligent men, in whose welfare we feel the deepest interest.

We shall take up the subject of medical reform again. In the mean time, we would earnestly entreat the friends and advocates of reform not to slumber on their posts. Certain influences are at work—secretly and in silence. The careful manner in which the details of the government measure, and the proceedings of the corporations, have been concealed from the great body of the profession, does not augur well.

REVIEW.

Dr. Hooper's Physician's Vade Mecum; or, a Manual of the Principles and Practice of Medicine. New Edition, considerably enlarged. By W. A. Guy, M.B., Physician to King's College Hospital. London: Renshaw, 1842. 8vo, pp. 493.

Dr. Hooper's Vade Mecum has been for many years known to the profession as a text-book of the practice of medicine. The original plan of the work has, however, undergone considerable alteration, so much so that the volume now before us bears scarcely any resemblance to the early editions. This alteration has been effected partly by the author himself, but principally by the editors to whose care the last three editions have been entrusted. It appears, from the author's preface, that his sole object in publishing the Vade Mecum was that of furnishing a concise treatise on the practice of medicine, for the use of students and junior practitioners. The late editor, Dr. Ryan, prefixed to the author's last edition a short outline of physiology, pathology, and therapeutics, with some brief directions for clinical examination and a sketch of symptomatology and semeiology. He retained the Cullenian system of nosology adapted by the author, and made several additions to the number of diseases treated. The present editor, Dr. Guy, has in a measure remodelled the whole work. In the first place he has expunged the introduction furnished by the late editor, and has supplied one of his own, more than double its length; he has also laid aside Cullen's nosology, and in its stead has adopted an arrangement "which brings together the diseases which affect the same organs, or are otherwise nearly allied to each other;" and the prescriptions, which were hitherto scattered through the body of the work, have been arranged under distinct heads and thrown together at the end.

In the first part of the present edition we have a bird's eye view of the principles of general pathology and therapeutics, which does infinite credit to the editor. This part consists of six chapters. The first and second chapters contain some excellent hints and remarks on the study of medicine, which the tyro may well profit by. The medical student, above all others, on commencing the study of his profession, frequently finds himself at a loss as to the proper course to be pursued with the view of acquiring the knowledge requisite for a practitioner of medicine, and by adopting an ill-planned line of study at this early period of his career, he is sure to entail upon himself a great deal of toil and drudgery, and at the end have but a confused knowledge of the subjects he has been studying. In Dr. Guy's introductory remarks he will, however, find some excellent rules to guide him in his pursuits, and which will materially obviate the difficulties alluded to. We could have wished that the editor had extended his observations on this important subject, but we are aware that the space within which he had to work was but of narrow compass, and the subjects to be considered were numerous and of paramount importance. The third chapter, on "Health and Disease," is a short one, and contains principally the definitions of medical terms which do not require any particular notice. The fourth chapter, containing an outline of physiology and general pathology, is divided into five sections.

In the first section we have a clear and succinct exposition of the entire process of digestion, from the mastication of the food in the mouth to its ultimate conversion into blood — the material by which the incessant demands resulting from the wear and tear of life are satisfied. Dr. Prout's views are brought prominently before the reader in this section, and, indeed, form the basis of the author's argument.

The second division of this chapter is occupied with the circulation and its conditions in health and disease. In treating of the "capillaries," Dr. Guy introduces some observations relative to the manifestation of the passions and emotions in the human face, which we shall briefly notice. "Here, then," says Dr. Guy, "we have three distinct causes of what is called determination of blood to the skin. In the first case, an emotion of the mind acts as the cause (as in blushing); in the second, a local application to the capillaries themselves (as heat); in the third, the increased action of the heart (as from exercise). From the first example it appears that the capillaries may be increased in size, without any increased action of the heart; for if it were due to that cause, the blush would not be confined to the cheek; the second shows that local applications will affect the capillaries in the same way, without disturbing the heart's action; and the third proves that precisely the same result may follow from the stronger and more frequent contraction of the heart itself. In the two first cases the cause is strictly local, and in no way dependant upon the heart's action." (p. 35) It is quite evident that the *effect* is the same in these three instances, although resulting from separate and perfectly distinct causes; but it by no means follows that the *modus operandi* is the same in each instance. Dr. Guy says that the cause of the blush is strictly local; and if it was due to the increased action of the heart, it would not be confined to the cheek. Now we should like to ask why, in cases of violent passion, where the action of the heart and arteries is manifestly increased, the flush is confined to the face exactly as in blushing from shame,

for, according to the editor's reasoning, the flush should be universal in that instance. Indeed, we are are at a loss to conceive how the external manifestation of an emotion of the mind, in which the organs of the sympathies are more or less engaged, can be attributed to a mere local cause, and regarded in the same light as a mechanical effect produced by heat or friction.

Although the editor here denies that the heart has anything to do with the act of blushing, he states, nevertheless, in the preceding page, that "the motion of the blood in the capillaries is entirely dependant on the heart's action"—an opinion long since established by Müller. These statements evidently clash with one another, and by no means tend to clear up this interesting point of physiology. They are, however, of negative value in showing that the red colour of the cheek from blushing is *not* the result of a local cause—the reverse of what the editor wishes to prove.

The remainder of the fourth chapter is occupied with some useful observations on structural pathology, the nervous system in health and disease, and on the influence of the mind upon the body.

In Chapter V., by far the best in the volume, we have an analytical examination of the principal symptoms and signs of disease. This chapter commences with a few brief remarks on the blood, more especially on the value of the cupped and buffed appearance of that fluid as diagnostic of inflammation. The editor inculcates the necessity of being cautious in receiving this condition of the blood as a sign of inflammatory action. It is liable to be influenced by the slightest causes, and is by no means an infallible test. It is observed even in the blood of chlorotic girls. The mere presence of the buffy coat, says Dr. G., is not an indication of the existence of inflammatory action; all that it indicates is, that there is an alteration in the relative quantities of the fibrin and the red globules. The fact that the buffy coat may occur in diseases not characterised by acute inflammation—lead colic, bronchitis, albuminaria, &c.—should put us on our guard against placing too much reliance on the phenomenon as a sign of pre-existing inflammation sufficiently severe to justify the further abstraction of blood.

The next subject which engages our attention is the urine in its healthy and diseased conditions. The editor has here furnished us with an excellent *resumé* of the principal facts bearing upon this important branch of pathology. A few brief directions, as to the method of ascertaining the specific gravity of the urine, would have made it complete.

An "examination" of the abdomen and digestive organs follows that of the blood and urine, in which we find three useful diagrams, showing the anterior, posterior, and lateral regions of that cavity. And finally, this chapter concludes with an exploration of the chest, wherein the organs of respiration and of circulation are severally considered. It would be impossible to enter into this section as fully as it deserves in the small space allotted to us, but we can confidently recommend it to the attention of the student and junior practitioner as the best epitome of the kind in the English language.

ROYAL MEDICAL SOCIETY OF VIENNA.

February 15.

MEMBRANOUS INFLAMMATION OF THE FAUCES.

Dr. Haller drew the attention of the society to inflammatory affections, partaking of the nature of croup, which had been so very prevalent since last September. The characteristic of these inflammations, which extended over the fauces, and often into the œsophagus, was an exudation of pseudo-membrane exactly like that which occurs in croup; the disease lasted from three to four weeks, and the treatment from which he derived most benefit was the internal and external use of muriatic acid.

Dr. Mojsisovics considered true diphtheritis as a rare disease, but a dangerous one; he related a case, however, which was cured in three days by the administration of ice-cold drinks, and recommended a further trial of the method. Several members spoke highly of the good effects of cauterisation in affections of this kind. A discussion then followed on the propriety of using cold in the treatment of acute rheumatism.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

EASTERN BRANCH.

A General Meeting of the Eastern Branch of the Provincial Association was held at Ipswich, on Friday the 17th instant. The following gentlemen were present at the meeting:—

Dr. Baird, Mr. Bartlett, Dr. Beck, of Ipswich; Mr. Bellman, Earl Soham; Mr. Bree, Stowmarket; Mr. Bullen, Ipswich; Dr. Chevalier, Aspall; Dr. Clarke; Mr. Crosse, Norwich; Dr. Durrant, Ipswich; Mr. Ebden, Haughley; Mr. Growse, Bildestone; Mr. Hammond, Mr. H. Hammond, Ipswich; Mr. Jones, Woodbridge; Dr. Kirkman, Melton; Mr. Martin, Holbrook; Mr. Muriel, Wickham Market; Mr. Pennington, Needham; Dr. Ranking, Bury St. Edmunds; Mr. Rodick, Halstead; Mr. Sampson, Mr. Sanderson, Mr. Walter Scott, Ipswich; Mr. Tomkins, Witham; Mr. Welton, Woodbridge; Mr. Wilkin, Walton.

Edward Beck, M.D., Cantab, having been called to the chair, opened the business by a lengthened and able address, of which the following is but a brief abstract:—

"We are met, Gentlemen (said the president), on this occasion, to further the objects for which the association was formed—objects familiar to you from the published Reports and Transactions which regularly pass through your hands. It must be gratifying to every member, but particularly so to those who joined it early, to see the steady progress it has made in numbers, weight, and respectability; that it will exert an increasing influence is very apparent, and the most watchful care should be taken to ensure that such influence is directed to really valuable and praiseworthy ends." Dr. B. then alluded favourably to the weekly Journal "circulated widely, and, it may be said, gratuitously amongst the members—a valuable acquisition—calculated to become a powerful aid

to the interests of the association and of the profession generally."

Dr. B. next directed attention to the benevolent fund connected with the association, urging its great usefulness, and regretting that the lowness of its funds prevented relief from being afforded in many instances of great distress. He alluded to the impulse given to certain departments of medical study by the association, and then referred to the treatment of delirium tremens, comparing the remedial value of opium and bleeding, adding, "I have, in more than one instance, abandoned opium from a suspicion that it was acting injuriously, and substituted moderate doses of henbane with satisfactory results. The improved habits of the community, and the progress of teetotalism, notwithstanding the checks it receives from the intemperate zeal of some of its advocates, will, it is to be hoped, in a few years make this still frequent and formidable disease a very rare one." Noticing the use of electricity in neuralgia, and of opium to accomplish the desired prostration in strangulated hernia, with many other remedial measures recently made prominent by respectable living authors, and having next referred to the valable labours of those recently deceased, whose talents and industry, he observed, smoothed the way to many of our present improvements, and laid the profession and the public under heavy obligations, the president concluded a most suitable address, with a few words respecting the East Suffolk Hospital; this small, but well conducted establishment, the foundation-stone of which would seem to have been laid but the other day, was placed in comparative affluence by the sum of 2,000 guineas lately raised by the Shrubland Bazaar, and had already furnished an unusual number of interesting cases; some of which he hoped, at no very distant day, might meet the eye of each member in the pages of the "Provincial Journal."

The President then called on J. G. Crosse, Esq., the honorary secretary, to read the report.

We regret that want of space compels us to give merely an outline of Mr. Crosse's report.

Mr. Crosse informs us that the Eastern Branch now enrols above 120 members. In Suffolk, where its numbers were greatest from the first, there is no defection; whilst in contiguous parts of Cambridgeshire and Lincolnshire, a great accession has been made.

"Since the formation of the Eastern Branch (says the reporter) each member, from the time of his admission, has been entitled to an annual volume of the Provincial Transactions; and it is a subject of congratulation that, for the last year and a half, a weekly Journal has been regularly published, and forwarded to each member. To the Editors of this Journal we cannot fail to acknowledge ourselves greatly indebted; its improved state is universally admitted, and its further advancement should be effected by the members themselves, who will, it is hoped, be induced to give frequent contributions to it."

The reporter next alluded to the General Association, which has, since the last meeting of the Eastern Branch, gone on increasing in numbers and efficiency, and has taken the lead in discussing all those important questions which have begun to excite attention only within the last few years, and which affect the interests of the profession at large. "The most prominent topics are the medical care of our pauper population, and the improvement of our medical polity by the legislature. Much time must elapse, and more experience be gained, before the former topic can be brought under regulations approaching to perfection. But two great points have undoubtedly been gained of late: the abolition of the system of tender is one of these; the other relates to the medical officers of unions being appointed for life, or so long as he continues to perform satisfactorily the duties he undertakes, instead of going out of office annually."

"On medical reform generally the profession has been kept in anxious suspense, and time for further consideration is still allowed, as the bill about to emanate from the present government will probably be postponed to another session of Parliament; and it must be regarded as one of the principal duties of the Eastern Branch to prepare for a full discussion, and to report upon the expected bill, as soon as its details are officially made known. In the mean time the members of the Eastern Branch cannot slumber over the collision of different and even opposite sentiments entertained by the most able and experienced, not so much as to the proper grades of the medical profession sanctioned and required by the public, as "how far the druggist ought to be restricted in prescribing, and the pretending quack left to his deceptious course, whilst the legally-authorised practitioner of the healing art enjoys no other privilege than that of being exclusively eligible to hold public appointments."

Mr. Crosse then adverts to "the unlimited field of inquiry offered by the practice of our noble calling, and urges the members of the Provincial Association to avail themselves of the channels so liberally offered them in the periodical publications of the society, by placing the best fruits of their experience before their brethren, for the general benefit and the advancement of their own reputation"

The conclusion of Mr. Crosse's report is occupied by a just tribute to the memory of two honorary members whose loss the Association have to deplore—Sir Astley Cooper and Sir Charles Bell.

After the adoption of the report, the following new members were added to the list of the Eastern Branch of the Association:—

Cambridgeshire.

Mr. Birman, Mr. Heys, Wisbeach; Mr. Crabbe, March; Mr. Lucas, Burwall.

Lincolnshire.

Dr. Cammack, Mr. Morris, Mr. Wilkinson, Spalding; Mr. Vise, Holbeach.

Norfolk.

Mr. G. Cordy Edwards, Coltishall; Mr. Garrard, Upwell; Mr. J. Ballard Pitt, Mattishall.

Suffolk.

Mr. Ebden, Haughley; Mr. W. Bransby Francis, Lowestoft; Mr. Jones, Woodbridge; Dr. Skrimshire, Sudbury; Mr. Sampson, Mr. Walter Scott, Mr. Sanderson, Ipswich.

The following memoirs and cases were then submitted to the meeting; we hope to be able to furnish a detailed account of some of them at another time:—

1. On Spermatorrhœa, by Dr. Ranking.

2. Fatal Case of Softening of Middle Lobe of the Brain, with the Dissection, by Dr. Baird.

3. On the Treatment of Incipient Phthisis, by Dr. Durrant.

4. Case of Sanguineous Apoplexy of the Spinal Marrow, by Dr. Ranking.

5. Fracture of the Dorsal Vertebræ, with complete Paraplegia, cured by Extension, by Mr. Crowfoot, of Beccles.

6. Cases of Fracture of Odontoid Process and of Dorsal Vertebræ, by Mr. Crosse.

7. Fatal Case of Jactitatio, by Dr. Baddely, of Chelmsford.

Amongst the resolutions passed at the meeting, we notice one for the reappointment of a committee to continue a conference with the Apothecaries' Company respecting an illegal practitioner, at Coggeshall, in Essex.

Two years ago the Company stopped all proceedings against this individual, on the grounds that he was to present himself for examination; but he is still practising illegally, no examination having taken place.

The following committee was appointed to watch the expected bill of Sir James Graham, for amending the polity of the medical profession:—Dr. Baird, Dr. Durrant, Mr. Crosse, Mr. Bullen, Dr. Ranking, Mr. Bree, Mr. Martin.

Finally, it was resolved, That, in future, a general meeting of the Eastern Branch shall be held only once in three years, and that the members of each county, or convenient district, be requested to organise themselves into a sub-branch for the purpose of holding a local annual meeting.

As the Eastern Branch extends over six counties, this sub-division is very applicable, and is felt to be desirable. The next general meeting will be held at Bury St. Edmunds, Suffolk.

QUALIFICATIONS OF UNION MEDICAL OFFICERS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I was much pleased to find a letter in your Journal of Saturday, May 28, relative to the qualifications for union medical officers (signed A Yorkshire Practitioner), accusing the medical men, who were in practice previous to 1815, of apathy respecting the recent regulations, issued by the poor-law commissioners.

I beg to observe that I am of the same class of practitioners as your Yorkshire correspondent, consequently not a member of the *Hall*.

When I was pursuing my medical studies in the year 1807, I was led to consider the College of Surgeons as a self-constituted authority, giving no qualification whatever, unless you were intended for the army or navy. At the period above alluded to, we were tested as to our knowledge of the several departments of our profession by men perfectly competent to judge of our efficiency. I well recollect after one of these examinations, asking the professor the necessity of presenting ourselves for examination at the college; his answer I perfectly remember, "Are you going to the army or navy, gentlemen?" We answered in the negative. "Then, if you are intended for private practice, pray keep your twenty-two guineas in your pockets; you may find them useful at some future time." I must confess I found this advice but too true on many occasions during my career.

The edict of the poor-law commissioners is a gross act of injustice to those medical men who were in practice before 1815, many of whom, to my knowledge, are men of deep research and great professional acquirements, and have stood their ground for more than thirty years; but, alas! this avails nothing.

Practical experience is good for naught; they must be ousted by theorists in their profession, in obedience to the *law* of Somerset-house; men without any practical knowledge, who are ground up by some private teacher, to answer questions like a parrot, are to have the precedence of the really practical man, who has maintained an unsullied reputation for years; and all this because the latter is not in possession of that *sine qua non*, the diploma of Lincoln's Inn-fields.

I should have thought ere this, that the intellectual powers of the commissioners were sufficiently enlightened to enable them to see the extreme folly and injustice of acting upon such a principle.

Self-interest is now-a-days the first law of nature, and if the powers of the commissioners be carried out to their full extent, they will be the means of bringing plenty of grist to the mill of Guthrie and Co., although the former has stated in his letter to the profession, that he was perfectly disinterested in the matter, and had nothing to do with the regulations.

Notwithstanding these observations, I am by no means adverse to testing the tyro by examination; but he should have practical experience for some years ere he is entrusted with the lives of the public.

I am sorry to find that, in too many instances, the commissioners have entrusted the care of unions to very young men, whose sole recommendation consisted in undertaking the office at a degradingly low price.

In conclusion I must say, that medical men have brought this sad state of things principally on themselves; they should have united firmly in one band, and repelled with indignation the Somerset-house fulmen, as a derogatory to the profession at large. With these observations I beg to subscribe myself,

A Cambridgeshire Practitioner for upwards of Thirty Years.

MUSK.

Dr. Hanle, of Lahr, prepared a mixture containing six grains of musk, three ounces of berry laurel-water, and six drachms of syrup of almonds, and sent it to the patient for whom it was prescribed. To his great surprise it was returned to him, because it did not possess the odour of musk, and either contained very little, or else an inferior article. Dr. Hanle, well aware that he had used the best musk, ascertained by experiment that the odour was changed by the addition of the syrup of almonds. Messrs. Soubeiran and Boudet followed in his steps, confirmed his statement, and discovered further that the same effect is produced on assafœtida. The odour of six grains of musk is so much diminished by forty scruples of the syrup of almonds, that some persons, not aware of the experiment, could not detect it, while others discovered it, but very feebly.—*Bulletin de Thérap.*

RETROSPECT OF THE MEDICAL SCIENCES.

HYDRENCEPHALOCELE.

An interesting case of this rare malformation has been placed on record by Mr. Lyon, one of the surgeons to the Glasgow Royal Infirmary, in a communication published in the "London and Edinburgh Monthly Medical Journal," to which some valuable remarks are attached. A child was born in the year 1841, having tumors on either side of the upper part of the nose, of a glossy, spotted appearance, with numerous small vessels ramifying on the surface. They presented a spongy feel, were diminished by direct pressure, but not by compression of the great arterial vessels. Respiration through the nose perfect, and the palate entire. When the finger was pressed on the tumors, there was an indistinct feeling as if it had entered some cavity. A consultation took place at the infirmary as to the nature of the case: they were at first deemed to be *nævi materni*, from their glossy appearance, vascularity, diminishing under pressure, and resuming their former size when the pressure was removed, their deep red colour, distinct pulsation, and tension while the child was crying. This opinion was abandoned when the tumors were found to be transparent by transmitted light. Then again it was surmised that they were cysts springing from the bones of the face or jaw, connected with the antrum, or else enlarged lacrymal sacs. Their recession and resiliency during and after pressure, their colour, pulsation, &c., controverted the former of these positions, and, together with their situation, showed the second to be erroneous also; while their contents not escaping from the puncta or nostrils during compression, proved they were not caused by dilatation of the lacrymal sacs. The surgeon to whom was due the discovery of their translucency, stated his belief that they were connected with the brain and contained fluid, supplied from between the membranes, the tumors being in his opinion analogous to spina bifida, an hypothesis explaining all the appearances detailed.

The result of this consultation was that one of the tumors should be punctured, an operation that was performed on the one on the right side, when about a drachm of limpid fluid was discharged slowly, and partly from the effect of pressure, which, when exerted on the left side, caused the serum to flow more rapidly, leading to the conclusion that a communication existed between them. The little patient died eight days afterwards, and, on examination of the body, there was found a deficiency of the anterior part of the roof of the ethmoid cells, and of a small portion of the internal angle of the orbitar plate of the frontal bone, through which the tumors, consisting of the membranes of the brain and a part of the anterior cornua of the lateral ventricles, protruded. There was not any osseous partition between the cysts and eyeballs, the ossa plana being wanting. The antra were not involved in the malformation. The ventricles contained about two ounces of serum, and there was effusion of seropurulent fluid between the dura mater and the arachnoid, and plastic lymph on each of the membranes.

The results of the sectio cadaveris have confirmed Mr. Lyon in his belief that the case was one of hydrencephalocele; and he states his opinion that this malformation, spina bifida, and chronic hydrencephalus, are only three varieties of the same morbid condition, the only difference being one of extent between the first and third, and of locality between them and the second. In this view he holds the treatment adopted to have been incorrectly applied, and thinks puncture of such malformations to be pregnant with highly dangerous consequences. The same treatment is applicable to hydrencephalocele as to spina bifida; and Mr. Lyon alludes to several cases, where persons have reached maturity, notwithstanding the existence of a large spina bifida, and especially to one where a spontaneous cure was effected.

The similarity between hydrencephalocele and spina bifida, he says, is still closer, if we allow the correctness of the idea, maintained by many anatomists, that the bones of the cranium are only the more complete development of the rudimentary parts existing in the vertebræ. In any view of this matter, the similarity of the contents of the skull and spinal canal in organisation, and partially in their functions, the identity of their membranous coverings, and the sameness of their pathological states in the diseases enumerated, authorise us to consider the treatment applicable to one of them as equally proper for the others. This treatment, in Mr. Lyon's opinion, is graduated and equal pressure, applied not merely to the protrusion, but over the whole head, as he believes the tumor to be merely indicative of chronic hydrencephalus.

INFLAMMATION OF THE CŒCUM—ACCUMULATION OF FÆCES.

Dr. Gerbaud has published several cases of inflammation of the cœcum, caused by the accumulation and induration of fæcal matter in the intestines. In one of these cases the diagnosis was verified by the autopsy; the cœcum was found to be the only part inflamed, and its mucous membrane thickened, softened, and ulcerated. Inflammation of the cœcum comes on suddenly, and the seat and intensity of the pain aid the diagnosis materially. The symptoms resemble those of hernia, local peritonitis, and acute cystitis, but its situation and progress will distinguish it from those affections. A long circumscribed tumor in the situation of the cœcum is found in those cases where the inflammation is caused by the fæcal accumulation, and is not unfrequently mistaken for other diseases. Lisfranc was sent for, fifteen years ago, to a patient who was said to have a fibrous tumor in the rectum. She was suffering from diarrhœa, and no one suspected the accumulation of fæces in the intestine. She was paraplegic, and the orifice of the rectum being very dilatable, a tumor, covered with a reddish pellicle, could be easily distinguished. On examination, and scratching this with the nail, Lisfranc discovered, to his surprise, that it consisted of a fæcal mass enveloped in false membranes. It was extracted, but not without difficulty.

Retention of stercoral matter in the lower portion of the intestinal tube, as high up as the sigmoid flexure, is of more frequent occurrence than supposed. Authors advise the extraction of these matters with

a curette, when they are within reach, but Lisfranc considers that dangerous consequences might arise from such a proceeding. He recommends, in preference, breaking them up with the index finger, and washing them out with injections; this, however, is not always an easy operation, on account of their being situated in a distant part of the intestine.—*Ibid.*

NERVOUS APHONIA.

Aphonia, dependant on a disordered condition of the nerves of the muscles connected with the function of speech, comes on suddenly, and immediately after the influence of the exciting cause has been exerted. In the majority of cases the loss of voice is complete and absolute; the patients are either entirely mute, or can only produce very feeble sounds. There is not any pain in the larynx, any difficulty of breathing, cough, or morbid secretion. It is very frequently intermittent, coming on suddenly and disappearing in the same manner, often under the influence of a lively moral impression. There are several varieties of nervous aphonia. The idiopathic, dependant on lesion of function of the laryngeal nerves and muscles, is divided by M. Hirtz into hypersthenic, and hyposthenic. The first is induced by exciting causes, and shows itself in irritable and sanguine temperaments. It comes on suddenly, is commonly attended with a feeling of strangulation, and has little tendency to a chronic state. The other variety of idiopathic aphonia —the hyposthenic or paralytic form—is brought on by debilitating causes, is more obstinate, and more difficult of removal. Stimulating frictions over the larynx, the inhalation of steam, blisters, frictions with croton oil, aluminous and benzoic insufflations are recommended, and should be tried in the first instance before having recourse to more powerful measures. On their failure, setons, electro and galvano-puncture, strychnia and the substances containing it, may be employed.—*Journal de Médécine.*

ERYSIPELAS.

Considered in a surgical point of view, erysipelas depends more as regards its predisposing cause on external, atmospheric, or meteorological inflammations, than on the state of the general health or constitution of the patient. Its determining or occasional cause is almost always a wound or irritation of some part of the skin, the efficient cause being generally some matter coming from without or from disorganised tissues, and mixing either primarily or secondarily with the fluids of the diseased part. The fluids thus changed produce two orders of morbid phenomena, those indicative of general disorder, and local disease. An isolated spot of erysipelas is generally removed in from four to six or eight days, but as the entire inflammation is composed of a number of successive erysipelatous spots, its duration varies in proportion to their number.

With regard to the treatment, Velpeau has kept notes of 400 cases treated by different plans. Of these, 25 were subjected to compression; 33 to the successive application of blisters, either upon the immediate seat of the inflammation, or around it; 30 were treated by the nitrate of silver, either in substance or solution, sometimes applied on the surface, sometimes around it. In two cases the actual cautery was used, and in all these the remedies were without satisfactory results. The Neapolitan ointment was tried in 200 cases, and was found to shorten the duration of the complaint a day or two, and perhaps to render it rather less painful; but its application is repugnant to the patient, gives rise to salivation, and spoils the linen. 23 cases were treated with purified fresh lard, which was less efficacious than the mercurial ointment; 12 by the white precipitate ointment, which increased the disease; 10 by very diluted sulphuric acid; 6 by citric acid, tartaric acid, oxicrat, and salt water; 6 by the acid nitrate of mercury, used as a lotion in 3 cases, and in the others as a slight caustic around the circumference of the inflammation, but all unavailingly. The application of camphor, and puncturing the part were equally useless.

Velpeau, from the experience gained in the treatment of 40 cases, recommends the sulphate of iron, which, he says, has really arrested the progress of the disease in the majority of cases. He employs it in solution in the dose of thirty scruples to a quart of water, and in ointment, containing eight scruples of the chalybeate to thirty of lard. The ointment is not so useful an application as the solution, but it is more convenient when large surfaces on the body, neck, or head, require its use. The entire surface of the inflamed part and a little beyond it, should be anointed with it three times a-day. The solution is employed in lotions, compresses wetted with it, being applied every six hours, so as to keep the part constantly moistened.—*Velpeau.—Annales de Chirurgie.*

SPINAL IRRITATION IN INTERMITTENT FEVERS.

Dr. Gouzée has published an important communication on the morbid sensibility of certain portions of the spine in cases of chronic intermittents in the "Annales de la Société de Médecine d'Anvers," in which he states that this remarkable and little known fact of the production of pain by pressure on a particular point of the spinal column in agues has a direct reference to practice. The manipulation, according to him, requires considerable attention and practice; each of the spinous processes must be examined successively from above downwards, the apices of the index and middle fingers being pressed perpendicularly on the top of the process in its recognised direction, the compression being applied gradually and equally on all. In general, the patient is not aware of this morbid sensibility, and bears the examination of the cervical vertebræ with indifference, but as soon as the operator commences with the dorsal, he shrinks and gives evident indications of pain. Most frequently, while two or more vertebræ are tender to the touch, one of these will evince a higher degree of irritability than the rest, as may be ascertained by repeated examinations. The same amount of pressure, exercised on the lowest range of vertebræ, will not cause any appearance of suffering.

In illustration of these statements, Dr. Gouzée narrates several cases in which antiphlogistics and counter-irritants, applied near the painful portion of the spine, produced the most beneficial results. Leeching, cupping, and the Burgundy pitch-plaster sprinkled with tartarised antimony, so as to produce pustulation, were the remedial agents had recourse to, and were found of exceeding service. In the cases recorded, each application of leeches was followed by a marked relief of the symptoms, a diminished inten-

sity of the febrile accession. In one case, pressure showed the existence of morbid irritability of the spine in the neck, as well as in the dorsal vertebræ.

PARASITES IN APHTHÆ.

Dr. Vogel, of Munich, has observed vegetable parasites on the mucous membrane of the mouth and œsophagus of an infant a fortnight old, which died of aphthæ extending from the mouth to the cardia. These aphthæ, examined under a glass magnifying two hundred and twenty times, presented the appearance of genuine confervæ, similar to those found by Schonlein in impetigo. Some of these parasites were of a round shape, some with, some without, a central nucleus; some isolated, others grouped together; others again consisted of scattered filaments, swollen at certain points, sometimes in the middle, at others at the extremities. All of them were colourless, and unaffected by water, ammonia, or acetic acid.—*Gazette de Medicine.*

CONTUSIONS OF THE BREAST.

When a contusion of the breast has taken place, and its usual consequences have followed, every one knows it is requisite to have recourse to antiphlogistics and emollients; but, when the more marked symptoms have been removed, nothing more is done. Nevertheless, pain is still felt, either constantly, or only at the period of the catamenia, disappearing in their absence. It may be that, instead of pain, there is increased sensibility of the part contused, evident on the slightest pressure, and yet no enlargement can be detected on examination. Nevertheless, in every case enlargement will ultimately take place, especially if the abnormal state of the breast be not removed before the critical time of life. In ninety-nine cases out of a hundred patients, with tumors of the breast, will assign to their disease the origin and progress just described. It is, therefore, of the utmost importance to attend seriously to this state of pain or increased sensibility in a limited part of the breast, occurring after contusion, or when experienced without the patient being able to call to mind the occurrence of any previous injury. When all traces of the contusion have been removed by antiphlogistic and emollient treatment, if either pain or sensibility continue, the treatment must be persisted in; leeches must be applied if requisite, and anodyne and emollient poultices or liniments had recourse to. Rice poultice, moistened with the vinum opii, is Lisfranc's favourite emollient; but the skin of many women takes on erysipelatous inflammation when it is used, and in such cases he advises an application of oil of hyoscyamus, anodyne balsam, and vinum opii, pieces of linen steeped in this being applied to the breast, the dress being guarded by the interposition of dry linen compresses. When the poultice is used, it should be covered with a piece of waxed cloth, to prevent its getting cold too soon. When leeches are used, they should be applied around or below the gland, not on it. Every source of pressure or irritation of the gland must at the same time be strictly avoided.—*Lisfranc, Journal de Médécine.*

ADULTERATION OF MEDICINAL PLANTS.

The roots of gentian are sometimes mixed with those of belladonna and aconite, sarsaparilla with the roots of asparagus, the carex arenaria, and the stems of the hop. Among the roots of serpentaria we sometimes find those of aristolochia tomentosa, and spigelia marilandica. The rhizomes of bistort are often mistaken for those of tormentil—an error, however, of little consequence. The bark of canella alba is substituted daily for that of wintera aromatica, which belongs to a distinct natural order, and possesses different medicinal properties. The leaves of conium are confounded with those of arethusa cynapium, cicuta virosa, myrhis temulenta, and several others. Few specimens of fox-glove leaves, procured from the ordinary herb collectors, are free from leaves of verbascum, comfrey, or symphytum officinale. Among the leaflets of senna are found the leaves of arguel, cynanchum oleafolium, the leaflets of tephrosia apollinea, and coriaria myrtifolia; while the folia uvæ ursi are mixed with those of cow-berry, the vaccinium, vitin idæa. The flowers of the matricaria chamomilla and the pyrethrum parthenium are mixed with, and substituted for, those of the true chamomile, the anthemis nobilis. The stigmas of saffron are adulterated with the florets of the marigold, and the pimento is said sometimes to be mixed with cocculus indicus; but should this be the case, the latter is easily distinguished from pimento by the absence of the persistent calyx, as well as the bitterness and the want of aroma.—*Pharmaceutical Transactions.*

NITRATE OF POTASS IN HÆMOPTYSIS.

M. Gaudinau has employed large doses of nitrate of potass in many cases of hæmoptysis, with great success. He prescribes from eight to fifteen scruples of nitrate of potass, dissolved in one hundred and twenty of gum water, and sweetened with fifteen of syrup, one or two of these mixtures being administered in the course of the twenty-four hours. He has never found any unpleasant consequences in the digestive apparatus from so large a dose. This remedy has succeeded in cases of frightful hæmorrhage, when repeated general and local bleedings, pectoral ptisans, opiate looches, revulsives, and astringents have failed. The nitrate of potass has failed in only two cases out of fifty.—*Travaux de la Société Méd. de Dijon.*

USE OF THE MAGNET IN RHEUMATISM.

Five cases of rheumatic affection are published in the Annals of the Medical Society of Ghent, in which, according to Dr. Beydler, the application of the magnet was very serviceable. The diseases were sciatica, rheumatic ophthalmia, and other pains which had resisted other modes of treatment, and which were diminished or removed by frictions with the magnet. One of these patients, after the cure had been effected, died suddenly, probably from rupture of an old aneurism; and another was struck with apoplexy. M. Dumont has ascertained that both poles of the magnet should not be applied at once, and narrates a case of neuralgia of the wrist, in which the north pole of the magnet removed the pain, and the south reinduced it. A commission of the Royal Society of Medicine at Paris reported in 1775, that the magnet possesses a real and salutary action, which appears to be exercised directly on the nerves, over which it seems to have as much influence as steel. It is, consequently, adapted for nervous cases, especially when the nervous action is increased. It has not any particular influence on the fibres, humours, or viscera,

ROYAL COLLEGE OF SURGEONS IN LONDON.

The Council of the College, desirous of furnishing to the public a correct list of their members, request that each member will be pleased to transmit to the secretary, between the 1st of June and 1st of July in every year, by letter, a statement containing his name, address, and date of diploma, in his own handwriting, in order that it may be compared with the Chronological List.

The President and Council, in publishing the corrected list of the members of the present year, with the date of each diploma, regret that so many members have omitted to make the return requested by the Council. They are anxious to explain to the members, that the object of this annual registration is to furnish the judges, magistrates, clerks of the peace, poor-law commissioners, boards of guardians, and the public generally, with a correct list of qualified surgeons, in order to prevent the various impositions which have been practised upon them by ignorant pretenders and other unqualified persons.

The names of all members who shall not have registered themselves previously to the month of July, 1843, will be omitted in the corrected list of that year.

The President and Council particularly wish to intimate to all public functionaries, that no diploma can be genuine in which there is any erasure, interlineation, or other alteration.

N.B.—The corrected list for 1843 may be purchased at the College for one shilling.

EDMUND BELFOUR, Sec.

14 June, 1842.

ROYAL COLLEGE OF SURGEONS IN LONDON.

The second and concluding lecture on the Fossil Remains of Extinct Animals, will be delivered in the Theatre of the College, by PROFESSOR OWEN, F.R.S., on Wednesday, the 6th of July, at nine o'clock in the evening.

Tickets of admission will be delivered to members of the College upon personal or written application to the secretary at the College.

By Order,

EDMUND BELFOUR, Secretary.

June 14, 1842.

ST. LUKE'S HOSPITAL.

Dr. Philp has been appointed one of the physicians to St. Luke's Hospital.

PROMOTIONS AND APPOINTMENTS.

War-office, June 17.

7th Dragoons—Assistant-surgeon Milville Neale, from 92nd, to be assistant-surgeon, vice Bevan.

13th Dragoons—Assistant-surgeon John Sinclair, from the 30th, to be assistant-surgeon, vice Clark.

6th Foot—Assistant-surgeon William Duncan, from staff, to be assistant-surgeon, vice Jackson.

39th—Henry Armstrong, gent., to be assistant-surgeon, vice Sinclair.

92nd—William Bowie, M.D., to be assistant-surgeon, vice Neale.

Hospital Staff — Assistant-surgeon John Clark, M.D., from the 13th Dragoons, to be staff surgeon of 2nd class, vice West.

Henry Lionel Cowen, gent., to be assistant-surgeon to the forces, vice Duncan.

BOOKS RECEIVED.

Observations addressed to the President Elect of the British Association for the Advancement of Science on certain Statements, &c. By Alexander Nasmyth. London: Churchill, 1842. 8vo. pp. 58.

Statistical Tables of the Royal Infirmary of Edinburgh (July, 1839, to October, 1841). By Professor Reid, of St. Andrew's.

Remarks on Medical Reform, in a Letter addressed to Sir James Graham, Bart. By Sir James Clark, Bart., M.D. London: Murray, 1842.

Animal Chemistry; or, Organic Chemistry in its Application to Physiology and Pathology. By Justus Liebig. Edited by William Gregory, M.D. London: Taylor and Walton, 1842. 8vo. pp. 354.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

A correspondent in the country directs our attention to the inconveniences arising from the practice pursued by the *wives* of some general practitioners and druggists of making up medicines, and suggests that it should be immediately put a stop to. We are not aware of any means by which this objectionable practice can be prevented.

We feel obliged to the Editor of the "Dublin Medical Press" for his kindness in frequently borrowing articles from us; but we should like an "acknowledgment" for the matter thus borrowed. We also take this opportunity of informing our contemporary, that the lecture which he has borrowed from us in his last number, without acknowledgment, was not delivered by *Robert* Owen, the philanthropist, but by *Richard* Owen, the comparative anatomist! There is no necessity for copying even our errors.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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PROVINCIAL MEDICAL JOURNAL

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CASE OF AMPUTATION OF THE LEG, WITH SOME OBSERVATIONS ON A NEW MODE OF AMPUTATING.

By Thomas Green,
Surgeon to St. Peter's Hospital, and Lecturer on Surgery at the School of Medicine, Bristol.

James Allpass, aged thirty-four, a butcher, was admitted into St. Peter's Hospital, on Feb. 22, 1842, under the care of Mr. Green.

About four years ago the patient met with an accident, which caused a severe compound fracture of the right leg. After some time the bone united, not in a straight line, but obliquely, and there is now a considerable projection of bone at the seat of the fracture, around which the skin has been extensively ulcerated for some time. He has been repeatedly in the hospital; on each occasion the state of the ulceration was improved; but immediately on attempting to walk, it again degenerated into a state of foul extensive ulceration. On admission, the ulcer was found in a sloughing condition, with copious sanious discharge; the surrounding skin was of a fiery red color, and the whole extremely painful; the limb is shortened, and he cannot bring the heel to the ground; tongue coated; pulse quick; complains of cough and loss of rest.

Finding that the leg was entirely useless, and that he had suffered in general health from the last extension of ulceration, he consented to the removal of the limb; but the operation was deferred until he was in a fit state to undergo it.

March 6. The cough has now ceased; tongue clean; pulse natural; he sleeps well; the ulceration is in an improved condition, and the skin healthy below the knee.

Mr. Green decided on performing the flap amputation, but in a different manner from that in which it is usually done. A transverse incision having been made across the front of the leg, through the skin, another was made through the integument at the back of the limb, including a large portion of the calf, and leaving skin enough to cover the flap of muscle, which was next formed by passing the catlin through the leg a short distance behind the bones, and cutting out in the usual way; the remaining muscles were divided by a transverse incision passing between the bones, which were next sawn through, and the arteries tied. Hæmorrhage still continued from a large vein, which it became necessary to secure by ligature. Three sutures and pieces of strapping were applied to keep the posterior flap in apposition. Cold cloths to be constantly applied to the stump, and to take immediately half a grain of acetate of morphia in a draught.

9. The patient has had no unfavourable symptoms whatever until this morning, when hæmorrhage came on from the stump, from which he lost a considerable quantity of blood; the tourniquet was immediately placed round the thigh, and secured, by which the bleeding was arrested. He states that the limb has started occasionally during the night. His system shows the effects of loss of blood; his face and lips are pallid; feels faint and cold; pulse quick and small; tongue pale and tremulous. Cold water dressings to be constantly applied to the stump; to take at once half a grain of acetate of morphia; the tourniquet to be kept loosely over the femoral artery, and tightened immediately on the appearance of fresh hæmorrhage.

12. There has been no further bleeding until this morning, when the stump bled again to some extent in a few minutes; the tourniquet was immediately tightened, and the hæmorrhage was stopped. Mr. Green having been sent for, directed the same means to be used; the man to be kept perfectly quiet and closely watched. He stated that, on the return of any fresh hæmorrhage, he would apply a ligature round the femoral artery, considering it useless in the present stage of the wound to attempt to secure the bleeding vessel by opening the stump.

17. There has been no loss of blood since last report; a considerable portion of the wound on the fibular side has united.

April 6. The wound is entirely healed, except where one ligature hangs out; the others have come away. His general appearance is much improved.

20. The ligature only came away to-day, repeated gentle attempts having failed to bring it away previously; stump healed and in good condition.

On the method of operating resorted to in this case, Mr. Green made the following remarks at the next surgical lecture at the Medical School:—

I take the opportunity afforded me by this operation, of showing you the limb which has been removed, that you may see exactly how it has been done; and I shall briefly explain the reason why I operate in this way below the knee. I shall not now detain you by considering the comparative merits generally of the two modes of amputation, commonly known as the circular and flap operations, but beg to direct your attention specially to amputation as performed below the knee.

Some surgeons, I believe the majority, prefer the circular operation; others condemn it, and give a decided preference to the flap amputation at this situation. In one of the most recent works published in this country on operative surgery, I mean Mr. Liston's "Practical Surgery," he decidedly condemns the circular, and as strongly advocates the flap amputation in the upper part of the leg. For myself, I give a preference to the flap operation below the knee, and have always performed it, where the skin and muscle of the calf were sufficiently healthy to afford the large

flap necessary to cover the stump. The way in which this operation is usually performed is, I believe, the same as that described by Mr. Liston in the work alluded to. An incision is made across the fore part of the leg, by which the integuments are divided; the long knife being pushed through the limb immediately behind the bones, is carried downward and backwards, and a flap of sufficient size formed to give a covering to the face of the stump; the muscles lying in front and between the bones are divided transversely, and the operation completed in the usual way. The operation as just described is the one I have hitherto performed myself until recently; and the gentlemen present, who may have seen the termination of these cases at the hospital, can bear witness to their success, as far as the formation of a good stump is concerned. I have, however, found that there are evils practically resulting from this mode of amputation below the knee, and occurring during the operation itself, which, though I believe they do not interfere with its ultimate success, are still objections sufficient to induce many surgeons to give a preference to the circular operation. Amongst others, the high authority of Sir C. Bell is in favour of the circular operation, on account of the evils found to occur during the operation itself. He states as an objection to the flap amputation, that the muscle is larger than the integuments, and that the gastrocnemius projects beyond the skin, when the flap is brought over the face of the stump; he also says that the vessels and nerves are divided obliquely. These disadvantages are precisely what I have found to occur in practice from the usual flap operation; the projection of the muscle beyond the skin in muscular persons, when the flap is turned up, I have found a great inconvenience, and one which makes it necessary to strain the integuments more than is desirable to bring them over the mass of muscle. One of the evils, and not the least, is the manner in which the nerves are sometimes divided; it will occasionally be found that the long knife, in passing downwards to form the posterior flap, carries along its edge for some distance the large nerve of the leg before it is divided by the movement of the instrument backwards; this I have found to occur in two cases in which I have operated at the hospital, when fully an inch of the posterior tibial nerve was in each case hanging out from the flap, rendering it necessary to cut the nerve off close to the surface. Some of you have seen the pain which this has caused, though done as quickly as possible; the vessels are also divided obliquely, and here I have found greater difficulty in securing them than when cut transversely. The practical inconveniences attendant on this mode of operating I consider to be three: first, the projection of the muscle beyond the integuments; second, the oblique division of nerves; and lastly, the oblique division of the vessels. These, I admit, are all serious objections to the usual flap operation at this place, and have been sufficient to induce Sir C. Bell to recommend its being given up altogether. The same difficulty has occurred to other surgeons during the past and present century, and various contrivances have at different times been thought of, and employed, to obviate these disadvantages, by those who, for other reasons, give a preference to the flap. It has been proposed to cut off a portion of the muscle from the flap; in fact, to slice off that which is superabundant. I need hardly say that this appears to be altogether objectionable. The German surgeons have tried different ways of diminishing the quantity of muscle while preserving sufficient integument to cover the flap—such as drawing up the skin, and bending the ancle-joint at the time the incision is being made. This proceeding would be likely, to some extent, to obviate the difficulty, but not, I should think, sufficiently so to remove it entirely; at least, not in muscular persons. A knife curved laterally was employed, I believe, by Graafe, with the intention of diminishing the quantity of muscle by scooping a portion of it from the flap as it was carried along. Of these contrivances I can say nothing from my own experience, but should consider them not sufficient to prevent entirely the evils I have spoken of.

The mode of operating employed in this case I first tried a few months ago at St. Peter's Hospital, on a man named Morris, and found that by it all the inconveniences alluded to were avoided, for the man left the house with an exceedingly good stump, and now makes good use of in his vocation as a sweeper of one of the crossings at Clifton. I shall now describe the operation as I performed it yesterday, and if you examine the limb removed, which lies on the table, you will easily understand its stages. An incision was made anteriorly across the fore part of the leg, in the usual situation, about two inches below the tuberosity of the tibia; it extended from the inner angle of that bone to a point behind the fibula; from the termination of this incision, on the inner side of the leg, the knife was carried downwards to some extent, next across the limb posteriorly in a curved line, and brought up at the outer side, so as to unite with the front incision behind the fibula. In this manner a portion of integument was divided, which might be correctly described as representing two-thirds of an oval figure. This incision should go through the skin and subjacent tissue, down to the fascia covering the muscles; the contraction of the integument itself, with a trifling assistance, by drawing the skin upwards, leaving a separation of about half an inch between the edges of the incision. A long catlin was now pushed through the leg, about one-third of an inch behind the bones, and carried downwards, and next backwards, so as to make a flap of muscle, its edges corresponding with those of the retracted integument. The remaining muscles were next divided transversely; in this division are contained the large vessels and nerves, which are those cut transversely. The bones were separated, the sharp angle of the tibia was sawn off, and the arteries secured in the usual way. The flap, when brought up over the face of the stump, was entirely and abundantly covered by skin; three sutures were used, assisted by two broad pieces of strapping; a cloth wetted in cold water was applied over the stump, and the man removed. I prefer sutures in this operation, on account of the weight of the flap having a tendency to draw it down, and thus separate it from the anterior surface. These I always remove on the third day, and have not found any inconvenience from their use.

Should this case escape the usual casualties succeeding to amputations, I have no doubt the patient will leave the hospital with an excellent stump. In

the remarks now offered, I have not alluded to other questions involved in the comparative merits of flap and circular amputations, such as the mortality after each, the chance of secondary hæmorrhage, of union by the first intention, &c. These I shall consider at another time.

In conclusion, Gentlemen, should you decide on giving a preference to the flap operation, when in after years you may be called on in practice to make the decision, I can safely recommend to you its performance in the way I have described.

PULMONARY EMPHYSEMA AS A CAUSE OF DEATH.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—The following cases of pulmonary emphysema will probably be deemed interesting, as bearing upon the question considered in the memoir of M. Prus, noticed in your Number for June 4, p. 176.

I am, Gentlemen,
Your obedient servant,
R. T. Hunt.

Manchester, June 20, 1842.

Case I.—Rachael Rigby, aged one year and ten months, a strong, healthy child, has suffered from pertussis, with occasional dyspnœa, for three weeks. She has had no vomiting; her appetite has continued good, and she has run about as usual.

January 16, 1833, Five, p.m. Whilst out of doors, she was suddenly attacked with severe dyspnœa, the character of which was quite different from any that I had previously observed in chest affections. Inspiration and expiration were equally difficult, and both accompanied by violent and continuous struggles, which affected all the limbs; inspiration had a hoarse, croupy sound; every paroxysm of coughing produced a deep scarlet suffusion of the face, succeeded by lividity, with the lips of a deep purple color; the pulse was too rapid to be counted; she was perfectly sensible, and appeared to suffer most acutely. Six leeches were ordered to be applied to the chest, and eight grains of ipecacuanha to be taken immediately, and frequently repeated. The ipecacuanha had no emetic effect, and there was nearly three hours delay before the leeches were applied, in which time the symptoms, if possible, had become more aggravated. The bleeding, although very free, produced neither coolness of extremities nor the slightest faintness; and at half-past eleven, p.m., the child died, the symptoms having continued the same nearly to the last.

Autopsy, 17th.

Upon opening the thorax, the lungs, instead of presenting their usual collapsed appearance, not only completely filled the pleural sacs, but even rose above the level of the divided cartilages. The lungs were of a light reddish colour, and their pleural surfaces bright and shining, and showing no trace of adhesions. At first they appeared quite healthy, but upon closer examination there were distinctly seen beneath the pleura, occupying every visible part of the lungs, minute pearl-like globules, smaller than the head of a pin, all of the same size, and apparently constituting what Laennec has called vesicular pulmonary emphysema, or dilatation of the minute air vesicles. None of these vesicles were prominent upon the surface of the lungs. Rupture of a few vesicles was found where the pleura pulmonalis is connected with the pericardium, and the irregular form of these small collections of air, thus extravasated, at once distinguished them from those which I have called the dilated vesicles. The trachea and bronchi were not inflamed, but the interior of the larynx was slightly so, and near the rima glottidis a minute speck of lymph-like mucus was attached to the mucous membrane. The heart and abdominal and pelvic viscera were healthy, but all the abdominal veins were much gorged with blood. The brain was not examined.

Case II.—Mrs. J., aged about thirty-four, mother of several children, had enjoyed good health for several years, but had a tendency to plethora, and was of a florid complexion. She had been suffering from a troublesome cough since January 2, 1835, for which a blister, a common linctus, and a mucilaginous mixture, with small doses of potassio-tartrate of antimony, had been prescribed. On the 6th, the cough having increased, and being accompanied by dyspnœa, a sensation of weight in the chest, quick pulse, and checked urinary secretion, she was bled from the arm to syncope, and the dose of potassio-tartrate increased. She was much relieved, and continued improving until the evening of the 8th, when the cough suddenly became extremely harassing, and the dyspnœa very urgent.

When I saw her the symptoms had assumed a similar character to those described in the previous case, with two exceptions: the colour of the countenance, which to the last remained of a deep scarlet, never assumed the livid appearance; and free perspiration of the whole cutaneous surface, but more particularly of the head and face, existed. A mustard poultice was applied to the sternal region, and she took during the night sixteen grains of the potassio-tartrate of antimony, which produced only slight vomiting, and she died about six, a.m., on the 9th, having continued perfectly sensible to the last.

Autopsy.

The thoracic viscera presented characters so nearly similar to the former case, that a repetition is unnecessary.

Case III.—About three years since, through the kindness of my friend and colleague, Mr. Lynch, I witnessed the examination of the following case of emphysema:—A home patient of the Lying-in Hospital, a strong, plethoric female, about thirty years old, at the full period of pregnancy, felt so ill that she sent for her midwife, who, when she came, told her there were no signs of labour, and that she must send for the surgeon. When Mr. Lynch arrived the female was dead. All that could be learned from the friends was, that she had lately suffered from cough, which had suddenly become very harassing and painful, and that up to the time of her death she had been perfectly sensible.

There were no appearances in the uterus or appendages indicative of the commencement of parturition or of disease. All the abdominal veins were much

distended with blood, and, upon opening the thorax, the lungs were found completely filling the chest, not in the slightest degree collapsed, and presenting the appearances characteristic of general pulmonary emphysema already noticed. The cranium was not examined.

In all these cases the cough had suddenly become much aggravated, and in the two which I saw before death, the extreme difficulty of breathing was first noticed after a more than usually severe paroxysm of coughing. The peculiar description of dyspnœa, inspiration, and expiration being equally difficult, as well as the circumstances connected with the symptoms which immediately preceded death, when considered in conjunction with the state in which the lungs were found upon examination, appear to me to warrant the conclusion that the sudden supervention of this general emphysematous condition of the lungs was the cause of death, and that this injury was the result of the violent paroxysms of coughing. Upon comparing the symptoms which occurred in these cases with those which precede death in cases of acute bronchitis, pneumonia, pulmonary apoplexy, and croup, a marked difference will be observed. In the last stage of acute bronchitis inspiration is difficult, the usual quantity of air not being admitted into the lungs, and expiration is more forcible than in the natural condition of this function; but this does not in the least resemble the dyspnœa depending upon emphysema. The pallid and frequently œdematous state of the face and general surface in the former affection, together with the coldness of the extremities, the absence of severe pain, and the half torpid condition in which the patient lies, are all circumstances widely different from those accompanying emphysema. Symptoms equally diagnostic in other affections of the chest might easily be adduced, or the stethoscope, which was not employed in either of the foregoing cases, would at once indicate the presence of emphysema.

The extent to which circulation within the chest is impeded by permanent dilatation of the air vesicles, or, according to the opinion of M. Prus, by general extravasation of air into the cellular texture of the lungs, when the whole of both lungs has become thus affected, may be readily conceived. Life cannot long continue when so much air remains in the lungs after each expiration, that only a very small quantity of venous blood can enter the lungs from the heart. The small proportion of venous blood which, under these circumstances, is allowed to pass into the lungs, appears to account for the redness of the face, so different from the pallid, livid, or leaden hue, which is usually observed at the close of other fatal diseases of the lungs. It may be as well to state that this brief notice refers exclusively to general emphysema of both lungs, and that it is communicated merely with the view of corroborating the opinion advanced by M. Prus, "that general pulmonary emphysema may cause sudden death."

ON

TUMOURS PRODUCED BY ENLARGEMENT OF THE EXTERNAL ABDOMINAL VEINS, AND DEPENDANT ON DISEASE OF THE LIVER.

By Thomas Bevill Peacock, Esq.,

Pathologist to the Royal Infirmary, Edinburgh.

A varicose condition of the external abdominal veins, has fallen under the notice of most pathologists. Boyer* quotes from Severin a case in which a tumor existed in the hypogastrium, formed by the interlacement of enlarged veins, and states that he had himself seen one of a similar description. Reynaud† has detailed in the "Journal Hebdomadaire" the particulars of a case in which the varicose condition was traced to a cancerous growth, producing obliteration of the left iliac vein; and Cruveilhier mentions a somewhat similar instance in which the common iliac veins were obliterated by the pressure of an ovarian tumor, and gives a representation of the appearances presented in a case in which the umbilical vein was also found greatly distended, either from its canal never having been obliterated, or from its having again become pervious. With few exceptions, however, the cause giving rise to the dilated condition of the veins, has either not been ascertained, or has consisted, as in the cases of Reynaud and Cruveilhier, in some obstruction in the large venous trunks of the abdomen; and it is only very recently that Dr. Stokes,‡ in a communication to the Pathological Society of Dublin, drew the attention of the profession to this peculiarity, as present in some cases of ascites. Of the two cases referred to by Dr. Stokes, in one the varicose condition of the veins disappeared on the removal of the ascites, the other remained under treatment.

Case I.—Philip Taylor, aged thirty-eight, following the occupation of a groom, and of very intemperate habits, first came under treatment in the Chester Infirmary, in January, 1838, in consequence of a kick from a horse; at this time he also laboured under some degree of jaundice, with œdema of the lower extremities, and slight ascites. From these symptoms he recovered in a short time, and resumed his employment, but it was not long before he again applied for relief; the anasarca had then become extreme, the legs being not only swollen, but exuding an ichorous secretion, and the jaundice being also more marked; in the epigastrium there existed a swelling, elastic and movable, under the integuments, which, when he was in the recumbent position, was smaller and less conspicuous, but became full and prominent on his standing up. Into this tumor a large vein passed up from the groin on each side, and these vessels by their union seemed to constitute its chief bulk, and then to pass down below the edges of the ribs. The veins coming from below were fully the size of the fore finger, and were remarkably contorted. The tumor was at least ten inches in diameter, and was

* Traité des Maladies Chirurgicales, t. 2, p. 280.

† Andral's Pathological Anatomy, Trans., vol. 2, p. 415; a second case, related by Reynaud, involving the cava and Portal veins, and attended with ascites, is referred to by Dr. Stokes, but I have not been able to see the original paper.

‡ Dublin Journal, vol. 20, p. 482.

situated below, and its centre somewhat to the right of, the zyphoid cartilage; being subjected to a mercurial and purgative course, the tumor became less in size, and the jaundice declined; he, however, went out, and resuming his usual habits, was shortly after readmitted in an apoplectic attack. From this he partially recovered, but complained much of pain on the right side; the jaundice became more intense; the tumor more distended; fluid accumulated to a large amount in the abdomen; and he sunk under a fresh attack of coma in February, 1839.

On examining the body, the parietes of the abdomen were found much loaded with fat; the tumor was less than during life, and proved, as had been anticipated, to consist of the union and numerous interlacements of the two large veins, proceeding from below, embedded in a dense cellular tissue; several of the venous branches in the tumor were of sufficient size readily to admit the point of the fore finger. From the upper part, large vessels passed out, entering the mediastinum, and communicating with branches of the internal mammary veins. The liver was extremely small, and exhibited the usual appearances of cirrhosis, being of a deep orange-brown colour, and studded over its surfaces, more especially on the under side, with small mammellated masses, varying from the size of a pea to that of a marble. Its inferior edge was thick and obtuse; on section, its texture resisted the knife, and was extremely firm; the surface exposed displayed a similar tuberose appearance to the exterior, and the small masses were separated from each other by a paler membrane. The whole organ was remarkably free from blood, and weighed 37¾ ounces; the gall-bladder contained several small calculi, but the ducts were, throughout, unusually large; no obstruction was detected in any of the venous trunks, and the remaining viscera of the abdomen, and those of the thorax, were healthy, the heart only displaying some degree of hypertrophy, with dilatation of the left ventricle. The brain exhibited no sign of disease; several small masses of bone were embedded in the course of the longitudinal sinus.

Case II.—Mwyndeg Thomas, aged forty-five, had formerly served in the navy, but latterly followed the occupation of a shoemaker, and was of intemperate habits. In January, 1840, he was admitted into the Chester Infirmary, and stated that he had been ill upwards of twelve months, and incapable of following his employment for eight; he was much emaciated and very weak; his complexion sallow, and the conjunctiva somewhat tinged; he complained of pain in the right hypochondrium, increased on pressure; the stools were pale; some fluid was detected in the abdomen, and the legs were swollen; his tongue was dry, and brown in the centre; the pulse quick and weak, and the hands tremulous. A tumor similar to that present in the last case existed in this; veins following the course of the external epigastric artery entered the tumor from below, and others passed out above, crossing over the thorax; the centre of the tumor was situated about midway between the zyphoid cartilage and the umbilicus, and to the left of the linea alba. No treatment to which he was subjected was attended with any marked benefit, the skin gradually became jaundiced; the ascites and œdema of the lower extremities increased; he suffered from occasional attacks of hæmatemesis with pain in the head and delirium, gradually lapsing into coma, in which state he died in July.

The veins were found on examination, after freely anastomosing in the tumor, some to proceed over the chest, to comminute with the branches of the external mammary and intercostal veins; others to enter the mediastinum, and unite with the internal mammary veins. The internal epigastric veins were also greatly dilated, and were in connection with those of the tumor. The liver was small, weighing only 41 ounces, and its surface irregular, and covered with a thick layer of opaque membrane. A section displayed the characters of cirrhosis, though to a less degree than in the former case; nor was the organ so devoid of blood, being of its usual brown color. The gall-bladder and ducts were healthy, and the former distended with viscid bile; the spleen was very large, weighing 33½ ounces, and firmer than natural; the kidneys were in an advanced state of granular degeneration, and the serous covering of the intestines showed marks of recent inflammation; the stomach contained much dark, grumous blood, from which the duodenum was entirely free; at the cardia the mucous membrane seemed denuded of its epithelium over a space about the size of a half crown, beneath which the vessels were turgid with fluid blood; the thoracic viscera were healthy, and the brain exhibited no sign of disease, with the exception of the bloodless state of its vessels, in which it corresponded with the rest of the system. No disease affecting the vena cava or its branches was detected.

REMARKS.

In both of the above cases it will be observed that the affection of the liver was of the same description, and as in neither was any obstruction detected in the large veins of the abdomen, the varicose tumors formed by the external veins must be traced to the state of the liver. That form of disease to which Laennec applied the term cirrhosis is, indeed, that in which the circulation is most impeded, and which might, therefore, be expected to give rise to this peculiarity. Dr. Carswell has shown, contrary to the opinions of Laennec, Andral, and Cruveilhier, that this affection depends upon the growth of a contractile fibrous tissue in the capsule of Glisson, surrounding the Portal vessels and lobules of the liver, and so compressing the organ, that in the advanced stages of the disease its bulk becomes greatly diminished, and its whole texture acquires an extreme degree of firmness, and is divided into irregularly shaped masses, containing a varying number of the ultimate lobules. In the above cases not only was the bulk of the organ much less than natural, but its weight was reduced from the average of 54 ounces* to 37¾ and

* The average here stated is calculated from the data given by Dr. Clendinning, in his paper on the "State of the Vital Organs in Chronic Diseases," contained in the twenty-fifth volume of the "Medico-Chirurgical Transactions." My own observations, founded, however, only on a small number of cases, would make the average somewhat higher. The average of 132 cases given by Dr. William Thomson, in his recent work on the Liver, cannot be adopted as a standard of comparison, since it includes the weights of several organs greatly beyond what is natural, and others taken from persons under twenty years of age.

41 ounces respectively. With the growth of the fibrous tissue the lobular divisions of the Portal veins are subjected to compression, and as the texture of the organ becomes divided into the small tumors, these press on the larger trunks, so that the circulation becomes greatly impeded. The veins are first distended; laminated clots are then deposited in their interior, and at length they become entirely obstructed, and the blood, returning from the viscera, is forced to seek other channels for its passage to the heart. Dr. Carswell has given a plate of a liver affected with the last stage of this disease, in which the hepatic branches of the vena porta and its trunk were filled with clots composed of blood, fibrine, and bile, and states that he has seen two other cases of the same description. Similar cases have fallen under the observation of Dr. Hope, and very recently I had the opportunity of examining a case of cirrhosis combined with medullary sarcoma, in which the Portal vein, for three or four inches, was obstructed by a laminated and decolorised clot, evidently of old date. Mr. Hodgson* states that he was informed by Dr. Farre that clots occasionally form in the smaller Portal branches in cases of chronic disease of the liver, and that he had since found them himself.

The cases of obliteration of the Portal veins, described by Dr. Carswell, do not appear to have been attended with any unusual degree of dilatation of the external veins—a symptom which, if present, could not have escaped his notice; nor did it exist in the case recently seen by myself. That the extreme degree of enlargement present in these cases should occur in so small a proportion of those in which the liver is affected with cirrhosis, must be ascribed to the more direct communication existing between the vena porta and vena cava than between the former vessel and the external venous trunks;† and as in both Dr. Stokes's cases, and in those just described, ascites was also present, it is probable that the pressure exerted by the fluid in the abdomen on the deep-seated vessels may have assisted in determining the blood to the external veins—a supposition which derives support from the circumstance that considerable dilatation of the veins of the abdominal parietes is present in most cases of ascites.

* "Treatise on the Diseases of the Arteries and Veins," note, p. 527.

† "In some cases of atrophy of the liver, and in cases in which the circulation through the liver has been for some time obstructed, a collateral circulation is established by means of the communications which take place between the capsular branches of the hepatic artery and Portal vein and those of the phrenic artery and vein."—Kiernan on the Anatomy and Physiology of the Liver—Phil. Trans., 1833, p. 733.

CARTILAGINOUS DISEASE, WITH PERFORATION OF THE STOMACH.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—The accompanying case presents some peculiarities which may render it of general interest.

I understand from Mr. Lacey, of Newark, under whose care, and that of Dr. Morton, Mr. T. had been for some years, that he never had any symptoms which would indicate the existence of so much disease in the stomach, as the post-mortem examination has revealed.

Mr. Lacey thus writes to me:—"In reply to your inquiry, he never had exhibited symptoms of diseased stomach; the pain of which he complained was directly across the abdomen and below the umbilicus, and more especially in the right inguinal region; but on the 19th of March he complained of pain through the upper part of the chest on the left side, which was removed by a few leeches, and a blister. After very careful examination of the abdomen both by Dr. Morton and myself, he never complained of pain or pressure over the region of the stomach or elsewhere, and said 'he could bear a blow to be given him without pain,' nor could we discover any irregularity of surface. The pain generally came on at night, and continued for some hours, and left him much enfeebled."

I have much pleasure in placing this case at your disposal if you think it worthy of publication, and beg to remain,

Your faithful servant,

George Kennion, M.D.
Physician to the Harrogate Bath Hospital.

On Friday, June 10, 1842, I was requested to see Mr. T., aged forty-nine, in consultation with my friend Mr. Parry, of this place. His appearance was somewhat emaciated, although not to any great extent; his countenance was anxious; the pulse 76, and languid; the tongue white and swollen, with a very slight yellow fur in the centre. His principal complaint was of extreme distension of the bowels, "as if he would burst;" there was no tenderness on pressure in any part of the abdomen; the bowels had been relieved in the course of the day, and the motions were reported as being very black and offensive; his urine was natural in appearance and quantity, and its healthy condition was confirmed by the ordinary tests. His appetite, was on the whole, good, and he never suffered any pain or inconvenience after eating, beyond that arising from the flatulence.

I found upon inquiry, that he had been more or less out of health for some years, but without any leading or any tangible symptom, until about six months ago, when he received a violent shock in consequence of the sudden death of a near relative. Since that time he has been considerably worse; the leading symptom has consisted of the frequent recurrence of paroxysms of intense pain, generally coming on at night, and referred almost entirely to the umbilical and hypogastric regions; these paroxysms were always connected with a great degree of flatulent distension, and generally passed off with the discharge of flatus. The pain, however, was so violent, and returned so frequently, that for many months he has not known, I believe, what it was to have three hours of continuous sleep.

Under these circumstances, he came to Harrogate about the 1st of June, where he had found great relief on former occasions, when out of health. He drank the sulphuretted waters at first for some days, without any medical advice; but not receiving any benefit, he called in the assistance of Mr. Parry, who, finding the biliary secretions and the whole digestive

apparatus much impaired, directed his treatment to these points, and with so much success that Mr. T. said for weeks he had not slept so well, or felt so comfortable, as the first two or three nights after Mr. Parry saw him. Still, however, he did not gain strength, and it was at this time that I was called in.

The treatment which we agreed upon adopting was a continuation of the plan which had been commenced by Mr. Parry: small doses of blue pill, extract of colocynth, and hyoscyamus, to regulate the bowels; the nitro muriatic acid, with decoction of taraxacum as a general tonic and with the view of acting upon the liver, which was evidently at fault; and the use of the assafœtida lavement, for the purpose of relieving the tympanitic state of the bowels; at the same time his diet was carefully regulated. At my subsequent visit, the following day, on a careful examination of the abdomen, I stated my opinion that there was fluid in its cavity; but the flatulent distension was so great, that it was impossible to be quite certain as to its existence. There was no tenderness on pressure at the epigastrium, or any other part of the abdomen, and no irregularity of surface could be ascertained.

[In consequence of the temporary indisposition of Mr. Parry for two or three days, the subsequent history of the case fell wholly under my own observation.]

I left Mr. T. comfortable on Saturday evening, complaining only of the distension, and of very slight tenderness at the caput cœcum coli. On Sunday morning I was called up to see him at four, a.m., and found him with an excessively rapid pulse, which I could not count; the greatest anxiety depicted upon his countenance, and complaining of the most agonising pain over the whole abdomen, which was so tender that he could not bear the slightest touch. All these symptoms had come on about two hours previously.

He had a mustard plaster applied to the abdomen, and I ordered a dose of morphia to be taken immediately, and repeated if necessary. This seemed in some degree to relieve the extreme pain, but he became insensible about eight o'clock, and died at half-past nine, a.m.

Mr. Milnthorpe assisted me at the examination of the body twenty hours after death.

On opening the abdomen, we found more than three quarts of turbid serum, in which were floating a few small flakes of lymph. The bowels were immensely distended. On the anterior border of the lesser curvature of the stomach we found two irregular openings, of about three-quarters of an inch in diameter, the immediate margins of which were as thin as a piece of paper. These perforations were at the distance of about an inch and a half from the pylorus, and were situated in the centre of a mass of cartilaginous substance, which involved the whole circumference of the stomach, for a distance of from three to four inches from the pylorus. The mucous membrane lining this diseased portion did not present any unhealthy appearance, excepting that in one or two small patches, and around the edge of the perforations, it was slightly turgid, and of an ashy hue. But the muscular coat seemed to have disappeared entirely, and to be replaced by what I have above described as cartilage. The thickness of this substance varied in different parts from a quarter of an inch to an inch; it had a nodulated appearance, and when cut into was perfectly white, homogeneous in structure, and without any bands or striated appearance whatever. The pylorus itself was only slightly thickened, and this thickening appeared to depend entirely upon an hypertrophied state of the mucous membrane.

In some parts the serous coat of the stomach was involved in the cartilaginous degeneration, while in others it was quite healthy.

Attached to it in different places, by short pedicles, were a large number of small, fatty tumors, varying in size from a pea to that of a filbert, each being contained in a fibro-serous capsule.

The right lobe of the liver was slightly enlarged, and its whole tissue much congested. The gall bladder was perfectly empty of bile, and its cavity almost entirely filled by an immense gall stone.

The rest of the abdominal viscera were perfectly healthy. There was about an ounce of serum at the base of the brain, about six drachms in the ventricles, and between the arachnoid and pia mater there were a few slight traces of serous effusion.

High Harrogate, June 19.

CASE
OF
DIVISION OF THE URETHRA.
GONORRHŒA—URETHRO-PLASTY.

By M. Ricord.*

The subject of this case, twenty-six years of age, was admitted into the Venereal Hospital of Paris, on the 16th of June, 1840. When only seven years of age, the patient had amused himself by tying a piece of thread round the penis, close to its root. The consequence was an urinary fistula, which persisted from the time of the accident up to the period of his admission into hospital. The parts, at this latter period, presented the following appearances:—The whole thickness of the spongy portion of the urethra is divided across, a little in front of the scrotum, thus separating the canal into two portions; the two orifices resulting from this division are separated from each other about 11.077 lines (French) by a deep, hard, cicatrix, which surrounds the whole penis like a ring; the urine and semen pass entirely through the artificial opening; erection is complete, but the sensations, during coition, are confined to the posterior portion of the canal.

On the 1st of June, 1840, and eight days after connection, the patient was affected with gonorrhœa: the disease commenced in the posterior division of the urethra, and did not reach the anterior until four days afterwards.

June 17. The inflammation is excessively severe, and the discharge of a deep green colour, and very abundant; still the patient experiences pain only when the urine is passing over the posterior portion of the canal.

* A short account of this interesting case was published in the "Provincial Medical and Surgical Journal," Vol. II., 1840-41, p. 97. The complete history, for which we are indebted to the kindness of Mr. Acton, has just appeared in M. Ricord's Illustrations of the Venereal Disease.

19. The acute attack has almost completely yielded to rest and an antiphlogistic regimen; there is still a little pain in making water. To have twenty-four scruples of cubebs in three doses; to continue his regimen, but omit the baths. On the 21st the discharge from the posterior part of the urethra has considerably diminished, but that from the anterior remains unchanged.

24. The discharge from the posterior section has completely ceased. To continue the cubebs, and have better diet.

On the 1st of July the use of the cubebs was suspended; there is no discharge from the vesical portion of the urethra, while the state of the anterior part does not seem to be changed.

July 6. The discharge has reappeared in the vesical part of the canal; this may, perhaps, be explained by the fact that, during the use of the cubebs, the two artificial orifices were kept separated, but afterwards, this precaution being neglected, the matter from the anterior part came in contact with the posterior opening, and gave rise to a fresh infection.

8. The former treatment was adopted, and on the 16th the discharge from the vesical portion of the urethra ceased. Treatment continued.

17. A solution of the nitrate of silver was injected into the anterior segment of the canal, and on the 20th the discharge had nearly completely yielded to the injections.

22. No trace of discharge; the treatment was suspended, and on the 26th the patient was allowed to leave the hospital for some time.

The patient having thus been cured of his gonorrhœa, it remained to make an attempt to relieve him from the effects of his accident; but before describing the operation which I performed for this purpose, I shall make a few clinical remarks on some important points connected with the case.

Although the majority of surgeons, at the present day, refuse to admit a specific seat of gonorrhœa, yet many think that the fossa navicularis is the point at which it always commences. An attentive examination of facts, however, proves that the disease commences at the point to which the infectious matter has been first applied.

The pain of gonorrhœa chiefly depends on the passage of urine over the inflamed parts, and on the erections which occur. Independently of these two causes, the mere inflammation of the mucous membrane of the urethra causes very little pain, as was seen in the present case.

The state of this patient also afforded an excellent opportunity for ascertaining the mode of action of certain remedies in gonorrhœa. It was shown in the clearest manner, that the remedies acted through the medium of the urine, after having passed through the circulation and the kidneys. Thus, on two different occasions, the curative action of the cubebs was exercised on that part of the urethra only over which the urine passed, while the anterior portion of the canal remained uninfluenced by it.

I do not mean by this to deny, as some have pretended that I do, the general action of balsams; I admit that they may modify certain secretions, or communicate certain properties to the blood, but experience has proved to me that in this respect their action is more uncertain and less efficient, as was shown by the continuation of the disease in the anterior part of our patient's urethra, and as is seen every day in the treatment of balanitis, purulent discharges from the vagina, gonorrhœal ophthalmia, &c., where the balsams produce little or no effect. The action of these remedies in the latter cases is not specific, but merely revulsive, and when they are suspended the disease generally recurs.

The patient returned into hospital on the 20th of October, 1840, and on the 3rd of November I performed the following operation:—

Having placed him in the usual position for lithotomy, and introduced a sound with a wide groove through the orifice of the posterior portion of the urethra, I made an incision in the central line of the perineum about $8\frac{3}{4}$ lines in length, and commencing immediately behind the bulb of the urethra; the incision was carried into the urethra, and the latter divided to the extent of four lines; I now attempted, but in vain, to pass an instrument through the artificial opening, and at length succeeded with a female catheter, which I immediately fixed in its place.

My next step was to operate for the phymosis; I then refreshed the edges of the fistulous opening, and, when the bleeding ceased, I set about bringing the edges of the wound together. A small bougie was passed, through the meatus urinarius, down to the catheter, and the edges of the wound having been approximated in a transverse direction, were united with two alternate points of the twisted and common suture.

The patient was now placed in bed, the thighs being flexed and elevated on pillows; cold water dressing was applied to the wound, and two pills, containing camphor and opium, were administered; towards evening some reaction came on, and the patient was bled; the urine came away through the catheter in the perineum; on the following morning the urine still appeared to pass through the same channel, but the wound seemed a little swollen, and the ligatures moistened by the urine.

On the third day the sutures came away, and the urine flowed through the fistula as copiously as through the perineal opening; its edges, however, retained the transverse direction. On the sixth day the greater part of the urine passed through the fistulous orifices; the female catheter was therefore removed, and replaced by a larger gum-elastic catheter; on examining the female catheter, it was found that the orifice was completely obstructed by a clot of blood.

On the 17th an abscess formed in the scrotum, and was opened; the utmost care was now employed to prevent the urine from passing beyond the artificial opening in the perineum, but without success. This, however, was absolutely necessary, and in order to effect it, a longer catheter was passed into the perineal orifice; a bougie was also passed through the meatus urinarius, and brought out through the perineal orifice, but this likewise failed, and caused so much pain, that the patient removed it.

From this period, up to the 19th of January, the artificial opening in the perineum was gradually dilated by the introduction of larger and larger catheters; the abscess in the scrotum had now completely healed, and the urine escaped through the fistula in

small quantities only, and at distant intervals. As the patient became impatient, I was unable to wait any longer, and therefore attempted to bring the edges of the fistula together a second time. The edges were pared, and brought together by twisted sutures alone, which passed through the whole thickness of the skin; a bougie, as in the former attempt, had been passed down to the bulb of the urethra. The penis was now covered with lint dipped in cold water, and injections of cold water were frequently thrown into the bladder. The urine came away freely through the artificial opening in the perineum. On the 22nd, three days after the operation, the two external pins were removed; the edges of the wound appeared to be united; there was no trace of pus or of urine about it.

On the 24th the two remaining pins were removed, but a small quantity of pus and urine now escaped through a small opening at one angle of the wound. On the 1st of February this small orifice, which had been touched two or three times with lunar caustic, had completely healed up, but another one appeared at the opposite angle of the wound, and this continued for a long time in the shape of a capillary opening, scarcely visible to the naked eye. On the 12th of February, three months and nine days after the first operation, the perineal catheter was removed, and a small catheter introduced into the bladder along the urethra. This was done with some difficulty, but immediately afterwards the wound in the perineum began to heal, and was completely cicatrised on the 2nd of March. On the 17th of April there was no longer any occasion to employ a catheter. During the whole of this period, the capillary orifice already mentioned was alternately touched with lunar caustic and tincture of cantharides.

When the patient left the hospital he was completely cured; the form and functions of the penis were restored to their normal conditions; but a month elapsed before the semen could pass completely through the meatus urinarius.

COMPLETE PROLAPSUS AND SEPARATION OF THE VAGINA.

A woman, 25 years of age, who laboured under some slight disorder occasioned by errors of diet, took an emetic on the fourth day, which produced copious vomiting, and relieved her greatly.

A few days afterwards she began to complain of burning pain during micturition, and had some discharge of blood from the vagina, with severe pain in the external organs of generation. On examination, the external parts were found in a state of gangrene; on the following day the patient complained of an unusual feeling about the parts, and it was found that the whole vagina was prolapsed; as it was impossible to return it, antiseptic remedies were merely applied. The exposed parts now sloughed, and were finally completely removed on division of a band which retained them superiorly. The fever and other unfavourable symptoms quickly subsided; to prevent adhesion of the parts, a piece of sponge, moistened with some aromatic decoction, was introduced into the vagina. The vaginal portion of the uterus now became adherent to the upper edge of the vagina, while the lower remained free, and a new canal was formed, being merely somewhat shorter than the original vagina. The woman recovered perfectly, and the functions of the uterus were soon restored.—*Orvosi Tár, or the Hungarian Magazine of Health.*

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JULY 2, 1842.

Experience has abundantly proved that partial reform of long-standing abuses is to be deprecated almost as much as the absence of any reform at all. Piece-meal legislation and vaccilating policy are not only evidences of a weak and incapable government, but often inflict greater damage on the commonwealth than actual abuse of power or complete neglect.

It is, therefore, sincerely to be hoped that any attempt to reorganise the medical profession in this country will be based on general views—on careful consideration of what is required by the public and the profession at large—not on the narrow and selfish propositions which may emanate from any particular corporation, or obtain the support of any one class of medical practitioners.

The question of medical reform, which appeared to slumber since the unsatisfactory termination of the medical conference of last year, has been revived, in opportune season, by the pamphlet of Sir James Clark. The question has not been abandoned, nor has the zeal of its advocates undergone a change. Time, instead of allaying discontent, only increases our dissatisfaction, and every day adds fresh proof of the necessity—the absolute and pressing necessity—of a complete revision of the laws which are supposed to regulate the medical profession throughout the United Kingdom.

That such necessity exists, that an earnest and urgent desire of change is felt by the great majority of the profession, cannot be denied by any one who has paid the slightest attention to the subject. Formerly we thought that the licensing bodies were confined in number to nineteen, the Archbishop of Canterbury being included in the goodly array. The poor-law commissioners, however, have discovered that "the ordinaries of the several dioceses in England and Wales possess the power of granting licenses to practise medicine within their respective dioceses." Thus have we a legion of licensers added to the respectable number of nineteen, and the question of medical qualification involved in the most curious and inextricable complication. No wonder that the poor-law commissioners, aided by the law officers of the crown, should find it difficult to distinguish the sheep from the goats, or that doctors should spring up in every corner of the empire—full-grown like

the men of Cadmus, but endowed with a different instinct.

Fortunately for us the public are comparatively ignorant of these our family secrets. Were the public aware that, from the want of some standard measure of medical qualification, no less than nineteen classes of medical men are in circulation—that a bishop can convert any biped into a doctor, even as the Roman despot would have converted his horse into a consul—it is evident that the current value of medical science would sink to the lowest point. Yet we cannot hope—indeed, we ought not to desire—that the public should remain ignorant much longer of the condition, as a body, of those to whom health and life are entrusted. Reform, then, we must have; for our own honor it is requisite; for the public good it is indispensable; in a word—to borrow an illustration from the present state of our monetary system—it is necessary that a new medical coin should be issued, of standard uniform weight and value, and current by law in every part of the United Kingdom.

Such, we repeat, is the earnest desire of a great majority of the medical profession. The peaceful but arduous labors of the medical man render peculiarly obnoxious to him the heart-burnings, jealousies, and strifes engendered by the present condition of medical affairs. To continue his way, quietly and respectably, in the exercise of his profession, benefitting mankind by his science, while he procures for himself and his family the means of honorable existence, is the main object of his ambition. To pursue this object in peace is impossible under the existing state of medical affairs. The conflicting interests of our rulers have entailed upon us the curse of the disobedient son; the hand of the medical man is incessantly raised against his brother; laws and regulations, with the enactment of which we have had no concern, have created a diversity of interests in our community, and introduced confusion and strife into a commonwealth where harmony of feeling and identity of interests should have prevailed; the character of the medical man is thus lowered in his own eyes, while the public estimation which he enjoyed is deteriorated in a still greater degree. These facts are brought home to every member of the profession in all parts of the empire. At one time the demand for medical reform was but a low and confused murmur; it is now the voice of the many—strong in number, and confident in the justice of their cause.

But what is the measure of reform which we ask?—what the amendment which the enemies of reform affect to represent as a destruction of ancient institutions, prompted by a vague and restless love of change? The majority of reformers—those with whom all prudent and true friends of the profession are prepared to act—require nothing very violent in action, or destructive in its effects; they simply ask, as a fundamental measure, the institution of an uniform qualification for all persons who shall hereafter enter the medical profession; and, as a necessary consequence, they demand an equality of privileges for all those who shall have thus obtained an uniform qualification.

We should like to hear a single argument against this moderate and reasonable demand, drawn either from general considerations or founded on the more narrow basis of expediency. It is useless for those who are opposed to all reform to evade the true question, and, by attacking the doctrines of a few visionaries, divert attention from the true grounds of debate between us. We do not pretend that those distinctions which have been established by time, or grown of their own accord out of the necessities of the public, should be abolished; we do not call for the destruction of institutions which have conferred many undoubted benefits on the profession, if their existence can be rendered compatible with the public good; what we earnestly call for, on the part of our brethren, is a just and comprehensive arrangement, which shall embrace the whole profession, and put an end to the discord that now divides and distracts us.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Dr. Seymour, Vice-President, in the Chair.

June 14, 1842.

A Case of Local Tubercular Deposit upon the Surface of the Brain. By Robert Dunn, Esq.

The patient was a little boy, two years old, a fine intelligent child, who had been healthy from the time of his birth. He had suffered little during dentition. At eleven months he had twelve teeth, and could then walk alone. On the 7th of October he was first seized, and he died in about six weeks—on the 15th of November. He had awoke in the morning as usual, and was suddenly seized with a jerking or convulsive twitching of the left hand, but which did not extend beyond the wrist. Excepting this continued convulsive jerking of the hand, the child seemed to be quite well. There were no indications of general derangement. About a fortnight before the child had fallen down stairs, and from that time had been irritable and fretful. In about twenty minutes the jerking subsided. It returned the next morning for half an hour, and then extended to the elbow. The following morning there was a slight attack; and the next day passed without any jerking; but there was partial paralysis of the hand and arm, pyrexia, and general constitutional disturbance. He complained of pain in the head, and frequently applied the hand to the right temple. He had been freely purged at first. Leeches were now applied; counter-irritants; cold lotions and ice to the head; saline medicine and calomel, and James's powder every four hours. This course was pursued throughout the disease; and the ung. hydrarg. fort. was also applied to the arm-pits night and morning, but salivation was not induced. During the next four

or five days, he had frequent attacks of the convulsions, not confined to the hand and arm, but involving the whole of the left side and lower extremity in convulsive agitation, with twitchings of the eye and angle of the mouth, the attack lasting for hours. He cried, and even screamed violently, towards the close of the fits, but was sensible throughout, and could, at times, be soothed by his parents. The attacks were followed by profound sleep for several hours, and the side was left partially paralysed. For about a week he had no return of the fits, except occasional jerkings of the hand and foot. The paralysis was not persistent. He was dull and heavy, sleeping many hours; yet sensible when awake, and eager for food. He had a quick but weak and irritable pulse; dry, hot skin; and great thirst. He was then seized with a kind of cramp or spasm in different parts of the affected side, arm, and leg. The pain was most distressing, and seemed, as in ordinary attacks of cramp—which it closely resembled—to be, in some degree, relieved by active friction. After suffering in this way for three or four days, he was left with decided symptoms of effusion. The convulsions returned, attacking the right side in a similar manner in which the left had at first been affected. Both sides, and the whole body, indeed, eventually became affected with convulsive agitation, and the head, at the same time, drawn backwards. On the subsidence of one of these attacks he gradually sunk.

Note of the Post-mortem Appearances, by Dr. Todd, of King's College.—The scalp was pale and bloodless, like the rest of the body, which was much emaciated. The dura mater healthy. The vessels on the superfices of the brain were turgid with dark blood; but there was no sub-arachnoid effusion. The arachnoid cavity was natural. On the surface of the right hemisphere of the brain, under both the arachnoid and pia mater, there was a deposit of tubercular matter, disposed in patches of irregular shape and size, but the whole occupying a surface of about two inches square. The deposit was most abundant on the surface of the convolutions; but it nevertheless descended into the sulci between them, a circumstance which proved its connection with the deep surface of the pia mater. The cortical substance of the brain in contact with the tubercular matter was reddened, and greatly softened, and, on microscopic examination, evinced a nearly total destruction of the tubules in it, a great enlargement of the proper globules of the grey matter, and of the pigment granules which adhere to them. The softening extended a slight way into the subjacent white matter. On the edge of the left hemisphere, corresponding to the diseased patch of the right, a slight tubercular deposit had taken place in a similar manner, producing a red softening of the grey matter in contact, but not occupying more than half an inch square in surface. The ventricles contained more water than natural—about double—and did not collapse when laid open. The cerebral substance throughout, excepting at the diseased parts, was firmer than usual at the patient's age.

Mr. Dunn was of opinion that the fall which he had, had operated as an exciting cause in setting up diseased action about the tubercular deposit; and that the local affection—the simple twitching of the hand and jerking of the arm—was the consequence of the local membranous irritation thus induced. Irritation of the membranes and cineritious substance of the brain, he believed to be attended with convulsions, without decided or persistent paralysis, and that it requires the medullary matter to be involved to render the paralysis permanent. Admitting that red softening of the brain is the result of chronic inflammation of its substance, persistent paralysis, in the present case, was not to be expected until the inflammatory action had involved the medullary substance.

Notes of a Case of Petechial Cow-pox, with Observations on the Development of the Hæmorrhagic Diathesis. By Dr. George Gregory.

A child was vaccinated at the Small-pox Hospital on the 19th of May, 1842; to all appearance in perfect health. On the 4th day, petechiæ were first seen. On the 8th day, extensive ecchymosis occupied the usual seat of areola, and the body was covered with petechial spots. On the 16th day, the scabs had began to drop off, and all hæmorrhagic appearances had subsided. Two children of the same family had been vaccinated at the same time from the same lymph, who both passed through the disease in a normal manner. The child had not exhibited any previous symptom of constitutional weakness.

The author considers this to have been a case of true petechial cow-pox; not the coincidence of vaccination in an individual of hæmorrhagic tendency. He views it as an instance of the morbid matter of vaccine, usually so mild and so congenial to the human blood, proving poisonous to it, and developing the hæmorrhagic diathesis. It will be interesting, adds the author, to watch the future history of this child, to ascertain whether other morbid poisons have a like power of dissolving and deteriorating the quality of the blood, or whether this peculiarity attaches to the vaccine virus only.

The analogy subsisting between the phenomena of petechial cow-pox and petechial small-pox was noticed, and the frequency and severity of that form of variola illustrated by cases. The freedom of the brain and nervous system, in severe cases of petechial small-pox, was alluded to, which conspired with the present case in rendering it probable that the hæmorrhagic state is developed by a morbid poison through some direct agency on the blood itself, independent of the brain and nerves.

Petechial cow-pox is believed by the author to be exceedingly rare. He had never seen any other instance of it, and had only heard of two others.

ACADEMY OF SCIENCES, PARIS.

June 20.

FALLOPIAN TUBES.

M. Raciborski read a memoir on the connection between the Fallopian tubes and ovaries in the mammalia. As a general rule in domestic animals, the extremities of the tubes are arranged in such a manner as to envelope completely the ovaries during the breeding period.

In cases where the extremities of the tubes are not sufficiently large to embrace the whole ovary, the deficiency is supplied by prolongations of the peritoneum which form sacs embracing the ovary and fim-

bricated extremity of the tube. This arrangement explains the rare occurrence of extra-uterine pregnancy in animals.

EFFECTS OF HEAT ON THE SKIN.

M. Goudret has remarked that when a lighted match is placed in contact with the skin, it excites sharp pain, which, however, soon passes off, leaving behind it for a few days a small red mark on the integuments. The momentary application of a lighted match quickly removes, in most cases, the pain which accompanies rheumatism, gout, and other affections. The author has made numerous experiments with this species of moxa, and with the best effects. In cases of asphyxia it may be tried while other means are being prepared. In many cases it has been employed with effect in the commencement of epilepsy, the attack being prevented or retarded. When rabbits were asphyxiated by electric shocks applied to the occiput, and the lighted match passed along the spine, the animals recovered in a few seconds.

COMPOSITION OF ANIMAL SUBSTANCES.

M. Bouchardat read a memoir on the immediate composition of fibrine, gluten, albumine, and caseum. The chief conclusions derived by the author are—first, fibrine is composed of four immediate principles, in variable proportions—viz., of a matter identical with pure albumine, which the author proposes to call *albuminose;* this matter is enclosed in the meshes of a tissue composed of gelatine and of a principle exactly similar in properties to the epidermis, which the author names *epidermose.* Here, then, we find in the blood two fundamental principles of animal tissues—gelatine and epidermose—the existence of which in the vital fluid was not before known.

Secondly, The basis of albumen in the egg, of serum in the blood, of gluten in vegetables, and of caseum in milk is identical, unless we admit what is out of the question, that water scarcely reddening turnsol paper possesses sufficient chemical power to transform all these substances, at an ordinary temperature, into one and the same principle.

M. Dumas has, also, performed some recent experiments with the same results. His experiments, made in conjunction with M. Cahours, prove—

First, That the albumen of serum, eggs, and vegetables, is identical in composition.

Secondly, That caseum, whether taken from milk or plants, has the same composition as albumen.

Thirdly, That fibrine, derived from the blood or from plants, always contains more nitrogen and less carbon than albumen or caseum.

Fourthly, That almonds, peas, beans, &c., contain a principle something analogous to caseum, but furnishing less carbon and more nitrogen than fibrine.

Finally, When fibrine has been deprived of all its soluble matter by boiling water, it deposits a residium identical in composition with albumen and caseum; a fact well explained by the recent researches of M. Bouchardat.

M. RICORD.

The numerous pupils and medical men who have been in the habit of attending the lectures of M. Ricord, have presented him with a gold medal in testimony of the value which they place on his labours.

LEEDS GENERAL INFIRMARY.

[*Practice of Mr. T. P. Teale.*]

STRANGULATED HERNIA—OPERATION—SAC NOT OPENED.

[Reported by Mr. Gibbes.]

John Midgley, of Hunslet, labourer, aged sixty-nine, was admitted into the Leeds Infirmary, under the care of Mr. Teale, on the 14th of March, 1842, having been afflicted with oblique inguinal hernia on the left side for seven years. He had never worn a truss, and the hernia had always been reducible until the morning of the 12th of March, when he found that he could no longer replace the protruded parts. On the 13th he had one small fæcal evacuation, and occasionally vomited. On the following day, as the hernia did not admit of being replaced by his own efforts, he applied for relief at the hospital.

March 14, one, p.m. A large hernial tumor occupies the inguinal canal and scrotum, on the left side. The portion of the tumor within the canal feels hard and cylindrical; and is separated from the scrotal portion by a strongly marked depression in the site of the external ring, which evidently exerts a firm constriction of the tumor; the abdomen is distended and tympanitic; the bowels have not acted, nor has there been any vomiting since yesterday.

The taxis, aided by the hot bath, proving ineffectual in reducing the hernia, the following treatment was prescribed:—A large clyster to be administered immediately; a bladder containing the "freezing mixture" to be applied over the tumor, and two pills, containing calomel and compound extract of colocynth, to be given every two hours.

Eight, p.m. The clyster brought away some scybala in a softened state; the tumor is more tense and unyielding, although not particularly painful on pressure; the form of the distended coils of intestine can be distinctly felt, and even seen, through the abdominal walls; pulse 82, intermittent; the taxis is still unsuccessful. Under these circumstances, although the symptoms of strangulation were not urgent, it was deemed in consultation the safest practice to operate.

An incision, two and a half inches in length, commencing a little above the external ring, was made over the tumor. The skin, superficial fascia, and fascia of the cord having been divided, a director was passed under the external ring, which embraced the tumor very tightly, and a few fibres at its upper boundary were divided; after which, by a little manipulation, the protruded parts were replaced within the abdomen, a gurgling noise attending their return. The edges of the wound were united by two or three stitches, over which a compress of lint was applied, and retained in position by a few crucial folds of bandage.

15, Eight, a.m. Two hours after the operation the bowels acted freely, and the patient felt perfectly relieved. He has since slept well, and now feels quite easy and comfortable.

16. Has passed a good night; the bowels have not again acted; the dressings and stitches being removed, the wound is seen united throughout its whole extent. Castor oil to be taken.

17. The bowels have been freely opened; pulse 92; tongue dry and furred; a blush of erysipelas is seen

extending several inches from the upper extremity of the incision over the left iliac and lumbar regions; the wound has reopened, and looks sloughy; the abdomen is soft, and bears pressure without the slightest uneasiness. A strong solution of nitrate of silver to be applied over the inflamed portion of skin, and a poultice to the wound. A saline draught to be taken every four hours.

18. He has slept well; skin cool and moist; face slightly flushed; bowels open. The erysipelas has not extended beyond the line marked by the nitrate of silver. The wound discharges freely.

20. Wound healthy; pulse 80; tongue clean; skin cool.

29. Proceeding favourably.

April 8. Wound nearly closed.

15. A truss, with a large and but slightly convex pad, has been applied. Discharged.

COMPOUND FRACTURE OF THE CRANIUM—DEPRESSION OF BONE—LACERATION OF LONGITUDINAL SINUS.

Mary Rushforth, aged sixteen years, a chlorotic looking girl, was admitted into the Leeds Infirmary on the 2nd of April, having sustained a severe injury of the head.

April 2, ten, p.m. Her friends state that she has been subject to epileptic fits for the last two years, and that the catamenia have only appeared twice in a slight degree. Whilst at work in a factory, at three o'clock this afternoon, she was seized with epilepsy, and fell from the room in which she was working, through an opening in the floor, into the room below, a depth of about twelve feet, her head pitching upon the projecting iron rim of a large wheel which was lying on the floor. After she was taken to her ward, in the infirmary, it was ascertained that a wound of the scalp, three inches in length, extended over the right parietal bone parallel to and a little behind the coronal suture, terminating a little to the left of the median line. The right parietal bone was fractured, and depressed to nearly the same extent and in the same direction as the wound in the scalp; the depressed portion of bone was broken into several fragments, and its anterior edge pressed deeply upon the dura mater. She vomited occasionally, but was perfectly conscious.

Mr. Teale having applied the trephine in three situations, raised or removed the depressed portions of bone, and as soon as he removed that portion which was deeply depressed at the mesial angle of the wound, it was found that the sharp edge of bone had penetrated into the longitudinal sinus. The bone being removed, a profuse torrent of venous blood flowed over the patient's head. The hæmorrhage was immediately arrested by a small compress of lint, which was pushed between the bone and the dura mater at the inner angle of the wound. The hæmorrhage, although of short duration, was extremely profuse. The patient immediately became blanched and faint. The wound was dressed with lint smeared with cerate, maintained in position by a few folds of bandage.

3, Nine, a.m. She has passed a tolerably good night, but continues much exhausted.

Seven, p.m. Slight reaction has occurred; pulse 120; no symptoms of cerebral disturbance.

5. Wound discharging freely; compress of lint removed without hæmorrhage; bowels confined; pulse 120, feeble; tongue furred; skin cool; countenance blanched; œdema of right eyelids; no indication of matter under the scalp. To take castor oil.

6. She is restless and uneasy; the wound looks rather sloughy; œdema of the eyelids diminished; bowels open. Wound to be dressed with folds of linen wet with creasote lotion.

7. She had an epileptic fit of short duration yesterday; she is restless; the head is hot, and the skin dry. To take a dose of calomel and colocynth, and salines; wet cloths to be applied to the head.

8. Yesterday, at three, p.m., she had another fit, which was followed by copious venous hæmorrhage from the wound. A compress of lint was again introduced into the mesial angle of the wound, and retained by a bandage. She was cooler and more comfortable after the loss of blood, and had a little refreshing sleep in the evening. She is now extremely blanched and much exhausted, but is free from disturbance of the intellectual faculties. A blister to be applied to the nape of the neck, and a draught, containing chloric æther, to be taken every third hour.

8. There has been some oozing from the wound of blood mixed with pus, but it was not thought necessary to remove the dressings; the tongue is becoming cleaner; pulse 126, and a little improved in power.

9. Wound dressed; no hæmorrhage.

10. Skin cool; pulse 104; she feels better; the wound looks healthy, except that the dura mater appears to be in a sloughy state, and there is a tendency to protrusion of the brain. A graduated compress of lint was applied, and retained by a bandage.

12. Slight hæmorrhage has occurred two or three times, but it ceased on the application of cold.

14. There has been a slight oozing of blood during the night.

16. The tendency to discharge of blood still continues.

17. There has not been any recurrence of hæmorrhage since the last report, and she has not had any epileptic attack for many days; the wound looks healthy; the countenance more animated; pulse 100; tongue clean; skin moist, and of natural temperature.

23. She continues to improve; the brain has still a tendency to protrude. The cavity of the wound to be filled with lint, over which a piece of sheet-lead is to be secured by bandage, so as to maintain a moderate pressure upon the part.

29. The wound rapidly granulating, and its edges cicatrising.

May 14. She had a slight epileptic attack this morning. To take a fourth of a grain of nitrate of silver four times a-day.

27. Had a slight return of epilepsy yesterday.

June 1. Wound cicatrised. Discharged.

STRANGULATED VENTRAL HERNIA—OPERATION.

Richard Morton, of Knottingley, fishmonger, aged sixty-nine, of a very corpulent figure, and highly vascular countenance, was admitted into the infirmary on the 1st of June, 1842, labouring under symptoms of obstruction of the bowels.

June 1, Eight, p.m. He states that, after violent exertion, about two years ago, a tumor suddenly

formed at the left side of the abdomen, which has never since entirely disappeared, but is subject to slight variations in size, becoming smaller when he lies down, and is sometimes the seat of gurgling sensations.

At five o'clock this morning he felt very unwell, but nevertheless came as usual with his fish-cart from Knottingley to Leeds, a distance of sixteen miles. During his journey he gradually became worse, suffering from severe pains in the abdomen, and vomiting frequently. On arriving at Leeds, he applied to a chemist, who gave him some tincture of rhubarb. His sufferings continuing to increase, he applied for admission into the hospital. He is now much exhausted, moaning incessantly, and vomiting frequently large quantities of black fluid, like coffee-grounds; the skin is profusely bathed with perspiration, and is rather below its natural temperature; pulse 118, intermittent, and of moderate power; the abdomen, throughout its whole extent, is tender on pressure, more especially in the left iliac region, where a flattened oval tumor, about three inches in length, is perceptible to the touch, although it can scarcely be recognised by the sight. By pinching up the thick mass of fat covering this part, it is evident that the tumor is situated beneath the aponeurosis of the external oblique, which forms a tense and smooth covering of the tumor. The portion of the abdominal walls occupied by the tumor is extremely painful on pressure, and is readily distinguished from the surrounding parts by its hard, unyielding character. It is situated in the left iliac region, to the iliac side of the linea semilunaris, but does not appear to encroach upon that line. The bowels have not acted since yesterday. A dose of calomel and colocynth to be given immediately, and castor oil in an hour afterwards. A large clyster to be injected.

Eleven, p.m. The injection has brought away a small quantity of fæcal matter; the vomiting and pain in the abdomen continue; the tumor is hard, unyielding, and extremely painful on pressure.

Under these circumstances, Mr. Teale, with the approval of his colleague, Mr. Smith, proceeded to operate. An incision, two and a half inches in length, was made over the tumor, in the direction of its long axis, which corresponded with the course of the fibres of the external oblique. By this incision, the aponeurosis of the external oblique was exposed, tightly extended over the tumor. The aponeurosis being next divided, the hernial sac, covered by a rather thick layer of tissue, presented itself. On opening the sac, a coil of large intestine, of a high degree of vascularity, and a small portion of omentum were exposed. The fore-finger being now passed deep into the sac, the protruded parts were found to be constricted by an opening in the internal oblique and transversalis muscles, which presented a sharp, tendinous edge at its mesial border, where it was contiguous to the linea semilunaris. A deep grooved director was passed into the abdomen, and the opening dilated by the hernia-knife at its upper border; after which, the intestine was emptied of its contents, and then replaced within the abdomen; the omentum appearing healthy, but being extensively adherent, was allowed to remain in the sac. The wound was closed by suture and adhesive straps.

In half an hour after the operation the patient had a copious fæcal evacuation, and the abdomen became rather softer, but his sufferings were not at all mitigated. Pulse 120, and very feeble. He was ordered to take forty drops of tincture of opium.

2, Eight, a.m. He has passed the night in great pain, and constant jactitations, frequently vomiting dark-colored liquid. Pulse scarcely perceptible; cold perspiration.—One, p.m.: Dead.

Body Examined Seven Hours after Death.—A small portion of the sigmoid flexure of the colon had again descended into the sac, and was united by its posterior surface, where uncovered by peritoneum, to the neck of the sac by common cellular adhesions, which, however, were so lax as to allow of the intestine being pushed to and from the sac with great facility. The aperture was situated in the internal, oblique, and transversalis muscles, immediately to the iliac side of the linea transversalis, but without encroaching upon this line. The mucous membrane of the whole of the large intestine, from the cœcum to the protruded portion of the sigmoid flexure, was of a uniform black color and soft consistency; on detaching the mucous membrane, the submucous tissue was more intensely black; the interior of the cœcum and colon contained black fluid, similar to that which had been vomited; the portion of the sigmoid flexure which was lying in the sac was considerably injected, but its mucous membrane did not exhibit the high degree of discoloration observed in the intestine above; below this part the remaining portion of the sigmoid flexure, and of the rectum, appeared perfectly healthy; the small intestines exhibited no unnatural appearance; there was not any effusion in the peritoneal cavity, nor deposition of lymph on the serous surface; the vessels of the subserous tissue, near the site of hernia, were slightly injected.

ON THE CONVERSION OF BENZOIC ACID INTO HIPPURIC ACID.*

By Wilhelm Keller.

(From the Annalen der Chemie und Pharmacie).

So early as in the edition of Berzelius's "Lehrbuch der Chemie," published in 1831, Professor Wöhler had expressed the opinion, that benzoic acid, during digestion, was probably converted into hippuric acid, This opinion was founded on an experiment which he had made on the passage of benzoic acid into the urine. He found in the urine of a dog which had eaten half a drachm of benzoic acid with his food, an acid crystallising in needle-shaped prisms, which had the general properties of benzoic acid, and which he then took for benzoic acid. (Tiedemann's Zeitschrift für Physiologie, i. 142). These crystals were obviously hippuric acid, as plainly appears from the statements, that they had the aspect of nitre, and, when

* We reprint this paper from Liebig's "Animal Chemistry," by Dr. Gregory, just published. Mr. Ure seems to have concluded that the uric acid was converted into hippuric, under the influence of benzoic acid; but, from the experiments of Keller, it would appear that it is the benzoic acid, and not the uric, which undergoes transformation. This is an important point which we trust further researches of Mr Ure may enable him to clear up.—Eds.

sublimed, left a residue of carbon. But at that time hippuric acid was not yet discovered; and it is well known that, till 1829, when these acids were first distinguished form each other by Liebig, it was uniformly confounded with benzoic acid.

The recently published statement of A. Ure, that he actually found hippuric acid in the urine of a patient who had taken benzoic acid, recalled this relation, so remarkable in a physiological point of view, and induced me to undertake the following experiments, which, at the suggestion of Professor Wöhler, I made on myself. The supposed conversion of benzoic acid into hippuric acid has, by these experiments, been unequivocally established.

I took, in the evening before bed-time, about thirty-two grains of pure benzoic acid in syrup. During the night I perspired strongly, which was probably an effect of the acid, as in general I am with great difficulty made to transpire profusely. I could perceive no other effect, even when, next day, I took the same dose three times; indeed, even the perspiration did not again occur.

The urine passed in the morning had an uncommonly strong acid reaction, even after it had been evaporated, and had stood for twelve hours. It deposited only the usual sediment of earthy salts. But when it was mixed with muriatic acid, and allowed to stand, there were formed in it long prismatic, brownish crystals, in great quantity, which, even in this state, could not be taken for benzoic acid. Another portion, evaporated to the consistence of syrup, formed, when mixed with muriatic acid, a magma of crystalline scales. The crystalline mass was pressed, dissolved in hot water, treated with animal charcoal, and recrystallised. By this means the acid was obtained in colourless prisms, an inch in length.

These crystals were pure hippuric acid. When heated, they melted easily; and when exposed to a still stronger heat, the mass was carbonised, with a smell of oil of bitter almonds, while benzoic acid sublimed. To remove all doubts, I determined the proportion of carbon in the crystals, which I found to be 60·4 per cent. Crystallised hippuric acid, according to the formula $C_{18}H_8NO_5 + HO$, contains 60·67 per cent. of carbon; crystallised benzoic acid, on the other hand, contains 69·10 per cent. of carbon.

As long as I continued to take benzoic acid, I was able easily to obtain hippuric acid in large quantity from the urine; and since the benzoic acid seems so devoid of any injurious effect on the health, it would be easy in this way to supply one's self with large quantities of hippuric acid. It would only be necessary to engage a person to continue for some weeks this new species of manufacture.

It was of importance to examine the urine which contained hippuric acid, in reference to the two normal chief constituents, urea and uric acid. Both were contained in it, and apparently in the same proportion as in the normal urine.

The inspissated urine, after the hippuric acid had been separated by muriatic acid, yielded, on the addition of nitric acid, a large quantity of nitrate of urea. It had previously deposited a powder, the solution of which in nitric acid gave, when evaporated to dryness, the well known purple colour characteristic of uric acid. This observation is opposed to the statement of Ure; and he is certainly too hasty in recommending benzoic acid as a remedy for the gouty and calculous concretions of uric acid. He seems to suppose that the uric acid has been employed in the conversion of benzoic acid into hippuric acid; but as his observations were made on a gouty patient, it may be supposed that the urine, even without the internal use of benzoic acid, would have been found to contain no uric acid. Finally, it is clear that the hippuric acid existed in the urine in combination with a base, because it only separated after the addition of an acid.

STATE OF THE BLOOD IN HYDROPHOBIA.

The last number of the Austrian *Jahrbücher* contains an interesting case of hydrophobia, with an account of some experiments performed by Professor Berres on the patient's blood.

The blood was dark red in colour, and of an oily feel; with the exception of the portion contained in the heart, it furnished very little fibrin and did not coagulate. When examined under the microscope, the globules appeared as perfectly round corpuscles of a dull white colour, without any nucleus, and with a few dentated red rays along the edges.

The bicarbonate of potass developed the red coloured rays on the corpuscles; the same effect was produced more evidently by a concentrated solution of sulphate of copper, and the nuclei now appeared.

On washing the corpuscles with water, they became of a dull white colour, and seemed to pass gradually into a gelatinous, granular mass of molecules.

Concentrated acetic acid turned the corpuscles into molecules. At first, each globule changed into a cluster of small granules, which soon separated, thus showing the difference between them and the globules of healthy blood.

Under a solution of chlorine the globules remained transparent, but soon changed into a granular mass. When concentrated muriatic acid was mixed with a few drops of the blood, a considerable quantity of gas was disengaged, and the corpuscles were converted as before into molecules, with a few opaque, contracted globules mixed amongst them.

Treated with concentrated nitric acid the globules became small, round, and opaque; some few were oblong; some pointed at both ends.

Sulphuric æther, iodine, and corrosive sublimate were also employed with analogous effects. The action of water, chlorine, acetic and muriatic acids, was altogether different from that produced on healthy blood; the three first substances rapidly changing the corpuscles into molecules, and the latter disengaging a remarkable quantity of gas. The peculiarities then observed in the blood in this case may be stated to be—dull white globules, without nuclei; no appearance of the crenated margin; a very quick transition of the corpuscles into molecules, and a tendency to lose their individual character.

HONORARY DISTINCTIONS.

The King of Prussia, having instituted a civil section in the Order of Merit, has nominated Mr. Robert Brown, Mr. Faraday, Sir John Herschel, and Mr. Thomas Moore, knights of the order.

EMMENAGOGUE SOLUTION.

M. Bouchardat recommends the following as an emmenagogue:—Chloro-aurati ammoniæ, ten grains; distilled water, 300 scruples; alcohol, 36°, 300 scruples. Make a solution, and preserve in a well-stoppered vessel. This preparation is used with much advantage in cases of amenorrhœa and dysmenorrhœa, arising from debility, and is far superior to other preparations of gold, such as, for instance, the cyanuret of that metal. It is given morning and evening in the dose of a coffee-spoonful in a cupful of pure water, duly sweetened. The chloro-aurate of ammonia is obtained by dissolving one part by weight of the perchloruret of gold with two parts by weight of the hydro-chlorate of ammonia, in a sufficient quantity of distilled water, aiding the solution by the addition of a few drops of weak nitro-muriatic acid (aqua regia). The compound salt must be afterwards dried by a gentle heat.—*Annuaire de Thérapeutique.*

SINGULAR CASE OF CALCULUS.

Jean Baptiste J——, when eight years old, had a stone extracted from the bladder, in the hospital at Dijon, by a painful operation, the instrument having been repeatedly introduced in consequence of the stone having broken under it, and requiring to be removed piecemeal. Notwithstanding the length of the operation, and its painful character, he soon recovered. Four years afterwards he found two small calculi in the urethra, near the corona glandis. As they did not cause him any pain, nor interfere with the passage of the urine, and he bore in mind the severity of the previous operation, he took no notice of their appearance. At the age of sixteen, he discovered to his surprise a hard and voluminous substance in the urethra, near the scrotum. At eighteen, another large calculus was discovered nearer the bladder. At the age of twenty, a urinary fistula formed, which continued open for two years, and then closed spontaneously. He married after this, and notwithstanding this paving of the urethra, he became a father, and had four children. During all this time he enjoyed good health, with the exception of some pain in the urethra. Baptiste placed himself under the care of M. Rathelot, when forty years old, in consequence of his suffering severe pain, and experiencing great difficulty in making water, when he was freed from the annoyance by the successive excision of the calculi. The two first—that is, those situated near the corona glandis, were hard and smooth; they were as polished as marble, and fitted into each other—one being concave, the other convex; the third, equally hard and smooth, weighed sixty scruples; the fourth was the largest, and was shaped like a large gherkin. A small urinary fistula remained after the operation, which the patient refused to have cured.

DISEASE OF THE KIDNEY.

Dr. Barlow has narrated a series of interesting cases illustrative of the following points:—First, that there is a certain symptom connected with irritation of the kidney, and which, although not confined to it alone, is not necessarily connected with disease of those structures whose affections are most likely to be confounded with these of the kidneys, so that when this symptom is absent, we may eliminate, and thereby disembarrass ourselves of the consideration of all such affections of the kidneys as would necessarily be attended by irritation of that organ; and when this symptom is present, we are furnished with a reason for assigning the seat of the disease to the kidney, in preference to several adjacent structures. The symptom is sickness, or irritability of stomach.

Secondly, and further, there is a certain symptom, or rather, set of symptoms, dependent on the non-depuration of the blood by the kidney, whether this non-depuration be the result of mechanical obstruction to the flow of the urine, of a diminution in its quantity, or of a depraved condition of that secretion, in which its most important ingredients are wanting—viz., cerebral disorder of a peculiar character.

There are, however, several affections of the kidney which do not necessarily give rise to irritation of that organ, and in which the sickness *may* not be present to aid our diagnosis; of these, the principal are the granular degeneration, suppuration, and perhaps some forms of adventitious or malignant deposit.

In the first of these, the disease, depending in the first place probably upon congestion, and afterwards upon a chronic change in the structure of the organ, irritation is not a necessary concomitant, although the disease may, and no doubt frequently does, result from irritation, giving rise to chronic inflammation; accordingly, we find that sickness is not always present, although it is sometimes a most troublesome symptom. In suppuration we should generally have irritation, giving rise to sickness, in the first instance, and probably, at a later period, obstructed function, with its concomitant changes in the urine, and cerebral disorder, with probably, at some time, the presence of pus in the urine.

With regard to malignant disease, it is very probable that this deposit taking place, as has been remarked by Dr. Bright, in the cellular membrane connecting the firm parts of various structures, the parts of the organ in which this deposit takes place may be, as it were, pushed aside, without suffering any mechanical violence or functional disturbance; at the same time, it is also probable that, in the progress of distension to which this organ is subjected, some slight laceration, or irregular pressure, giving rise to irritation, will sooner or later occur, and accordingly some sudden invasion of sickness almost uniformly happens before such deposit in the kidney has produced a tumor of any considerable size. We should also in this case, probably, have some degree of hæmaturia, especially if the disease be of a fungoid character, the most common form of malignant deposit in the kidney.

Irritability of the stomach is not to be regarded as pathognomonic of disease of the kidney; but in cases where doubts arise as to whether any disease is to be referred to the kidney, or some neighbouring organ, the absence or presence of sickness will go far to decide the question; and further, in cases not unfrequently met with, where the prominent symptom is distressing and obstinate sickness without any assignable cause, especial attention should be directed to the kidneys, and every means used to

determine the state of those organs. The same observations will apply very nearly to the second class of symptoms—namely, the cerebral disorder; for as yet we want sufficient evidence to prove that similar derangement of the functions of the brain may not be produced by other causes. The cases narrated are nine in number.—*Guy's Hospital Reports.*

USE OF PURGATIVES IN TYPHUS FEVER.

In the course of 1839, M. Andral determined to try the effect of repeated purgation in typhus fever. 47 patients were submitted to this treatment, of whom 12 were suffering from a mild form of the disease, 21 had a more severe attack, and the remaining 14 were affected with typhus gravior; of these latter 6 died. Of these 47 cases, 29 were men, 18 women, and all were young, with the almost solitary exception of one patient, aged 36, and another, 42. The attack could not be traced in any case to either hygienic or occasional causes, save in two or three instances, where it was attributed to cold, in one to a journey on foot from Calais to Paris, and in another to a severe fright. The average day of admission into the hospital was the eighth day of the fever. In every case symptoms of affection of the abdominal viscera were present, and not one was regarded as typhoid fever, unless ileo-cœcal pain, increased on pressure, was discovered. Rosaceous, lenticular spots showed themselves in 23 cases—1 in the first list of 12 mild cases, 12 in the second list of the 21 more severe, and 10 in the third list of 14 of typhus gravior. Sudamina occurred in only 11 cases, 5 of the second list, and 6 of the third. Intestinal hæmorrhage did not show itself in any instance. Pulmonary symptoms appeared in all save 13, of which exceptions 7 were of the first list, 5 of the second, and 1 of the third. In 12 cases, intense bronchitis formed a complication of the fever, 9 of the patients being in the second list, and 3 in the third. The three last mentioned had pneumonia, end in acute tubercular degeneration. The heat of the skin, measured in every case daily by a thermometer in the arm-pit, never exceeded 104°, nor fell less than 99° Fahrenheit. Erysipelas of the face occurred in 2 cases of the third list, and probably hastened the fatal termination; in 1 case, intestinal perforation took place, and another presented all its symptoms. The typhoid fever was changed in one instance into an intermittent, which was cured by sulphate of quina. Of the 12 cases of the first list, 1 was entirely unaccompanied by nervous symptoms; in another pains of the limbs and joints were complained of; of the second list, 1 case of pains in the limbs and joints, 1 of ataxia, with delirium, and 1 attended with adynamic symptoms; in the third list, there were 2 cases of the ataxic form, 1 accompanied with violent convulsions, 7 of the adynamic form, and 3 of the ataxo-adynamic variety. The average duration of the disease in the first list was 12½ days, in the second 17 days, and in the third 26½ days, for the 8 cases cured; while of the 6 that died, one case terminated in 6 days, one in 9, one in 11, one in 28, one in 40, and one in 58 days. Convalescence was more prolonged, and the patient more liable to relapses, in the more severe cases than in those which were slighter.

The mode of treatment was the same in all the 47 cases. The day after the patient was admitted into the hospital, whether the attack was serious or slight, an emeto-cathartic of two grains of tartarised antimony was administered, which generally produced both emesis and catharsis; the next and following days, without interval, purgatives were ordered, and continued as long as febrile symptoms were present, at least until 16, 17, or 18 doses had been taken, when their employment was abandoned. The purgative used was almost exclusively the Seidlitz water, one bottle, containing 30 scruples of sulphate of magnesia, being given each day; towards the end of the treatment, when the action of the purgative seemed almost null, 45 scruples were given. Occasionally 60 scruples of castor oil, or 12 grains of calomel, divided into two or three doses, the last being followed an hour afterwards by a glass of Seidlitz water, was had recourse to. A senna draught was sometimes given also. The number of purgatives employed was as follows:—In the first list of 12 cases, one case, 3 purgatives; six cases, 4; three cases, 5; two cases, 6; the average quantity being 4½ purgatives. The duration of the fever in the hospital, from the day of admission to its removal, was in six cases 4 days, in three cases 5 days, in one 6 days, in one 8 days, in one 9 days; the average being 5 days, the total average duration of the febrile attack being 12½ days. In the second list of 21 cases, more severe, the purgatives were employed as follows:—In two cases, 4 purgatives; in one, 5; in two, 6; in seven, 7; in four, 8; in two, 10; in two, 11; in one 12; the average number was 8. The duration of the fever in the hospital, from the day of admission to its removal, was, in one case, 4 days; in one, 6; in five, 7; in four, 8; in four, 11; in three, 12; in one, 13; in one, 15; in one, 16; the average duration was 10 days, the total average duration having been 17. In the third list of 14 most serious cases, of which 6 died, the 8 cases of cure will be considered first. In two cases, 11 purgatives were employed; in two, 12; in two, 14; and in two, 16. In the cases which terminated fatally, in two cases 3 purgatives were ordered; in one, 7; in one, 10; in one, 14; and in one, 21; the average number was 13 purgatives for the cases which were cured, 10 for those which died. The duration of the disease in the hospital was undetermined in one case; in one, 13 days; in one, 15; in one, 17; in one, 20; in one, 24; in one, 27; and in one, 29; the average duration was 20 days, the total average duration being 26½. In the fatal cases, the duration in the hospital was in two cases 4 days; in one, 10; in one, 11; in one, 35; and in one, 52; the average being 19 days. As a general result, we have one fatal case out of every eight of well-marked typhus fever, the diagnosis of which cannot be called in question—a result which, in the opinion of M. Becquerel, the reporter, is favorable to the use of purgatives, more especially as these were not picked cases, but taken at hazard, from the wards of la Charité, in the course of six months.

The use of purgatives in cases where constipation existed caused diarrhœa, which continued during a part or the whole of the disease. The tongue generally got clean while they were employed, but little advantage resulted when the tongue was dry, reddish, and furred. When that organ was very dry, they were omitted for a time, and resumed afterwards.

When diarrhœa existed before purgatives were had recourse to, it was found to be increased the first day only, when it was generally accompanied with bilious vomiting, that being the day for the emeto-cathartic. The stools were rarely increased in quantity or frequency by the aperients, which never caused any intestinal hæmorrhage. Pain in the abdomen, and especially in the ilio-cœcal region, did not appear to be much influenced by them, nor were the pulmonary symptoms either. The duration of the complaint did not appear to be shortened by their use, but the fever never increased in intensity, and sometimes it was evidently lessened. In a word, the influence of the purgatives in very serious cases seems to have been null, while in those less severe, but still very dangerous, and in others still milder, it appears to have lessened the febrile excitement, and the symptoms seem to have diminished in severity as the aperients were repeated. The complaint, therefore, is rendered less serious, and in the most dangerous cases no injury did accrue from their use.—*Bulletin de Thérapeutique.*

BELLADONNA IN EPILEPSY.

Dr. Debreyne, lecturer on practical medicine at La Grande Trappe, Orne, has published a *resumé* of his experience of the treatment of epilepsy for the last twenty-five years, in the cases that have occurred under his charge, in which he gives the decided preference to belladonna as a therapeutic agent. He says that, after having tried in vain valerian, orange leaves, white oxyde of zinc, the meadow narcissus, the ammoniaco-sulphate of copper, the nitrate of silver, Méglin's pills, the cyanuret of potassium, the croton-tiglium, not used as a drastic purgative, but as an anti-epileptic, he was induced to have recourse to belladonna, by the perusal of a case published by Stoll in his *Ratio Medendi*, pars iii., p. 217. Of the other medicines mentioned above, he derived the greatest advantage from the oxyde of zinc, the nitrate of silver, and the valerian.

Dr. Debreyne has used the belladonna extract in about two hundred cases of epilepsy during the last twenty-five years, and he says there has been scarcely one in which its use was not attended with advantageous results. Generally speaking, the fits have been diminished in intensity, and have occurred less frequently, or have been altogether suspended for weeks, months, or even years. Cases have occurred where the fits used to come on every month or week, or even several times in the week, but where, under the influence of the belladonna, they have been suspended for six months, and even for one, two, or more years. Some patients have asserted that they had not had a relapse for seven, eight, or nine years. In all cases where the attack comes on with the premonitory aura, Dr. Debreyne furnishes his patients with a small bottle of liquid ammonia, to arrest the coming attack. The more frequent the fits are, the more readily is the complaint influenced by the belladonna; but when they occur only once every four, five, or six months, it is much more difficult to modify them—that is, to diminish them in intensity, or to suspend them altogether. In such cases the remedy should be administered some time previous to the presumed epoch of the nearest attack. At the same time it must be observed that belladonna is by no means a specific in epilepsy; in fact, cases would occasionally occur in which the severity of the fit would be for a time much diminished, or the attack altogether suspended, and yet, after the lapse of a certain period, the remedy would become altogether powerless. In such a case no other medicine was found of service. The cases of epilepsy spoken of throughout by Dr. Debreyne, are of course cases of the disease, when it occurs independent of lesion of structure; but, he adds, that in symptomatic epilepsy, if, after the removal of the cause, the fits should still recur by a sort of habit of the nervous system, the belladonna might be had recourse to, and, should it fail, the quina alone, or combined with valerian, might be ordered. The mode of administration of the belladonna is as follows:—Four scruples of the watery extract of belladonna are mixed with two of powdered gum arabic, and a sufficient quantity of any inert powder to make 120 pills, one of which is given the first day, two the second, the dose being gradually increased to six in the twenty-four hours, although it may be raised to eight or nine pills taken daily, if disordered vision, or other symptoms of the injurious effects of belladonna, do not show themselves. In that case the dose must be diminished, or omitted altogether for several days.—*Ibid.*

NITRATE OF SILVER.

M. Dumeril has for a long while employed a very simple process for preserving the nitrate of silver from the injurious effects of exposure to the air, when run into sticks. It consists in merely coating the caustic with engraver's sealing-wax, which contains a large quantity of shellac. This wax adheres very well, and forms a strong and smooth varnish, as it were, which remains unaffected by the atmosphere. Thus protected, the nitrate no longer stains the fingers, injures the caustic-case, nor is in any way changed by the moisture in the air, possesses a greater degree of solidity, and, at the same time, the process is of exceeding service in practice, inasmuch as when wanted for use, a small part only of the caustic need be uncovered by means of a penknife, so that its application can be restricted to the part where it is required. This is of peculiar utility in ulceration of the throat, aphthæ, fissures, &c.—*Ibid.*

BELLOWS-SOUND, A SYMPTOM OF ANÆMIA.

This interesting and important indication of anæmia was at first located in the arteries, and afterwards, by Mr. Ward and others, asserted to be in the veins. Like all other controversies, truth probably exists on both sides, and it appears to me certain that both sets of vessels are at times involved. The veins seem first affected, and, as the condition increases, the arteries follow. The superficial and deep sounds can be easily distinguished, and the former arrested by pressure with the stethoscope, which should be applied over the external jugular just above the clavicle, the head inclined to the opposite side, and the observer must sometimes wait and vary his position, and induce some changes in the respiration of the patient, before the sound becomes audible. It is liable to singular variations and alterations in intensity, and is often overlooked during a hasty examination. The venous sounds are louder, more roaring, and continuous than the arterial; as the health improves the latter ceases, and the former become more intermittent, more feeble,

and gradually disappear. The louder and more continuous the sound the greater the anæmia, and *vice versâ*.

The cause of this singular phenomenon is, no doubt, the diminished volume and modified quality of the blood, involving a want of proportion between it and its containing vessels. Andral's experiments seem to prove that the principal change consists in the diminished number of the globules, and the relative, if not actual, increase of the serum. The intensity of the sound, he thinks, may be measured by the fall of the globules; it commences when they descend from 127 to 80, and becomes louder from 60 to 40, and is extreme at 27. Below 80 it is constant in the arteries, and sometimes, he says, in the heart, while in rare instances it has existed when the globules were as high as 131 to 137.

It has been supposed that the cervical sounds were produced by pressure with the stethoscope, but it is impossible by such means to excite them in a healthy individual. The bellows-sound, independent of local pressure from tumors or valvular disease, may be regarded as pathognomonic of anæmia, whatever the co-existent state may be. It is a sign of great practical value.—*Dr. Cowan, Lancet.*

STATISTICS OF MIDWIFERY.

From the report of the Philadelphia Dispensary for 1841, we gather the following facts: — 126 women were delivered, all at full term, except one at 7½ months, one at 6½ months, and one at 5½ months. The average duration of labour in 98 cases, was 9 hours, the extremes being 30 minutes and 96 hours. The forceps were used in 3 cases, and there was well-marked uterine hæmorrhage in 7, 2 of which demanded the most assiduous attention to avert the imminent danger to which the patients were subjected. The average amount of time required for the spontaneous delivery of the placenta in 92 cases, was 15½ minutes, the extremes being 5 minutes and 5 hours. The introduction of the hand was necessary in 6 cases, after a delay of 1, 1½, 2½, 3, and 5 hours. In five of these cases the placenta was merely retained, in the sixth it was partly adherent, and required manual assistance for its removal. The number of children born of these 126 cases was 126; of these, 123 were at maturity, one at 7½, one at 6½, and one at 5½ months. Five were still-born; two apparently healthy; in one of them a breech presentation, the head being locked in the pelvis, strangulation took place before assistance could be rendered, and the other was born before medical aid could be afforded; two others were semi-putrid when born, and the fifth was barely alive when the mother was delivered at the 5½ month. Three children died within one month after birth, life terminating in convulsions, in two cases apparently with meningitis; one of these was born at 7 months. Of 101 presentations, which were carefully noted, 98 were of the head, and 3 of the pelvis; of the former, 80 were of the first position, 12 of the second, 2 of the third, 2 of the fourth, and 2 of the fifth. One fourth position was artificially changed to the second, and one fifth to the first.—*American Journal of Med. Sciences.*

USE OF THE STETHOSCOPE IN FRACTURES.

When the stethoscope is applied directly over the fracture itself, it matters not whether the plug is in it or not; but crepitus will be more readily perceived without it the further the instrument is withdrawn from the actual site of the fracture. The more superficial the bone the greater is the crepitus; movements scarcely appreciable will produce it; it is most evident over the fracture. By the use of the stethoscope we can not only ascertain the existence of a solution of continuity of the bone, but its exact seat also, thus enabling the surgeon to avoid many painful manipulations and tractions. If the fracture is complicated with riding of the fragments, crepitus is less easily perceptible, but is more readily distinguished after slight extension and counter-extension. The crepitus yielded by the fragments of compact bones is acute and crackling, while that from the broken portions of spongy bones is dull, resembling the action of a file on a hard, spongy body, as on pumice-stone, but occasionally intermingled with louder noises, similar to those of the more solid bone. Crepitus from oblique fracture is louder than from a transverse one. When there are fluids effused around, there will be heard in addition a sound like that produced by the foot in a shoe full of water. A comminuted fracture is distinguished by the audition of, besides the ordinary crepitus, a sort of cracking, as if several hard, angular bodies were rubbing together. The compound fracture is marked by sounds resembling strong inspirations and expirations made with the mouth wide open.

Dislocations cannot be mistaken for fractures, because the noise produced by the articular surfaces is slight and dull, like that caused by two moist and polished surfaces moving on each other, and is heard only on the site of the dislocation. The sliding of tendons in their sheaths gives us full, dull, saccular, rare sounds completely distinct from crepitus.—*Lisfranc, Clinique Chirurg. de la Pitié.*

HÆMATURIA.

An interesting case of hæmaturia has been recorded by Dr. Cowan in the "Lancet," occurring in the person of a gentleman, sixty-two years of age, who had previously enjoyed almost uninterrupted good health. When the loss of blood came on first it was slight, and readily yielded to appropriate remedial measures. It continued, however, to recur at intervals, but was never profuse or obstinate, until one day after a long walk, and riding outside a coach, when it came on to a considerable extent, and continued till he died, between two and three months after the last attack. The only local symptoms complained of were, variable pain and tenderness (never severe) over the right kidney, increased by sitting up, the bladder continuing free from distension, tenderness, or irritability. The sectio cadaveris showed great anæmia in all the organs; the kidneys small, pale, and healthy in structure, but containing a few scattered semi-transparent cysts. The pelvis of the right kidney and its ureter were dilated, thin, and filled with a pale urinous fluid. The bladder was moderately distended with a soft coagulum; its lining membrane pale and healthy, with the exception of a tuft of hypertrophied mucous membrane, flocculent and vascular in appearance, and situated in front of the vesical orifice of the right ureter, the muscular fibres round its base, for about an inch, being more developed than in other portions. These were the only morbid appearances.

The tuft referred to was probably the source of the hæmorrhage, and from its peculiar situation had obstructed the free ingress of the urine; this excited local muscular efforts, which mechanically congested the part, and kept up the condition of hæmorrhage. Fatal hæmaturia under such circumstances must be very rare, and correct diagnosis impossible. The complete absence of vesical symptoms is worthy of notice; the renal symptoms were evidently dependant on distension.

COURT OF QUEEN'S BENCH.

June 30.

LITTLE *v.* OLDAKER.

This was an action brought by the plaintiff, a physician and surgeon residing in Finsbury-square, against the defendant, a tradesman whom he had treated for a certain complaint. The sum demanded was £26 for an attendance of seven or eight weeks.

The attendance and reasonableness of the charge having been proved, it was submitted, on the part of the defendant, that, as the plaintiff was either a physician or assumed to be such, he was incompetent in law to sustain any action for compensation for services rendered by him in the medical character.

Lord Denman told the jury that he did not think that the mere fact of a man's becoming a physician disentitled him in law to recover compensation for services rendered as a surgeon, seeing that, if he were a surgeon only, he would be clearly entitled to sustain such an action. The jury returned a verdict for the plaintiff. Damages, £15 15s.

*** This decision is diametrically opposed to that of Lord Ellenborough; in the case of Lipscombe *v.* Holmes (2 Camb. n. p. 441) Lord Ellenborough held that, if a medical man wrote prescriptions, and put M.D. to his name, he must be non-suited, even though the work done was that of a surgeon and the person held a surgical diploma at the time.—EDS.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, June 17, 1842.

S. T. Frost, W. Spear, R. Alsop, W. H. Davids, H. Hayes, E. R. Owen, C. W. Mann, W. R. Shiell, W. Reynolds, J. R. Crawley, W. M. Powell, J. L. Robinson, A. Fairchild.

Monday, June 20, 1842.

J. Taylor, G. F. White, C. Shorten, R. E. B. Horniblow, T. O'Reilly, M. Hamilton, E. U. Berry, L. Bayton, B. Lever, S. Balding.

Friday, June 24, 1842.

Thomas Hitchcock Clark, James Mayer Carey, John Duke, Thomas Burdon Ward, Joseph Yellowley Gibson, John Bold Hyams, Thomas Robertson, Edward William Pilgrim, James George Risk, James Honeywood, John Collis Browne, Henry Penrith Allison, Frederick George Hammack, William Brett.

Monday, June 27, 1842.

Thomas Prince, Allan Brown, John Gregory, Alexander Gallye Lamotte, Frederick W. Alexander, Francis Seymour Haden, Henry Martin Holman, John Findlay.

APOTHECARIES' HALL.

Licentiates admitted Thursday, June 23, 1842.

W. M. Kelly, Lyme Regis, Dorset; J. Mills, Exeter; E. Cockey, Frome; T. Coats, Newcastle; H. W. Somerset, Milton Wilts; J. Percival, Rochdale, Lancashire; J. C. Chappell, 14 George's-street, Hanover-square; S. Singleton, Tiverton; J. S. Miles, Charterhouse, London; R. Haynes, Liverpool

BOOK RECEIVED.

Pulmonary Consumption; its Prevention and Cure. By Henry Gilbert. London: Renshaw, 1842. 8vo. pp. 296.

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Common Sense.—The man of science is on his last legs; his absurdities can only be explained by the existence of monomania. We cannot notice his follies, for to us, and to all the sane part of the profession, he is worse than dead.

ERRATA.

Page 235, col. 1, line 38, for "adapted," read *adopted*. Page 236, col. 1, line 2, *dele* "are;" line 41, for "albuminaria," read *albuminuria*. Page 231, col. 2, line 1, for "effect," read *offset*.

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ON

POISONING BY THE FIXED ALKALIES.

By M. Orfila.

I have thought it right to re-examine all the circumstances connected with medico-legal researches in cases of poisoning by fixed alkalies, because I have found many serious errors and lacunæ in the observations that have been hitherto made. Authors who have written on this subject have not sufficiently attended to the fact of the existence of potass, soda, and lime in many alimentary substances, and in the fluids and organs of man in their natural state. No one, as far as I am aware of, has yet been able to indicate in a precise and ready manner the means of ascertaining whether the fixed alkalies obtained from the analysis of suspected matters result from poisoning, or exist naturally in these matters. On the other hand, it seems to me to be important to discover whether the alkalies in question are absorbed under certain circumstances; and if so, by what means they can be discovered in the viscera to which they have been conveyed. I shall be very happy, if, in this communication, I am able, as I expect, to solve these important questions. The following facts I regard as indispensable to the completeness of this paper:—

Potass, Purified by Alcohol.

It is white, inodorous, of an exceedingly caustic taste, very soluble in water, and deliquescent. Its aqueous solution, either moderately strong, or very concentrated, turns the syrup of violets green, and turmeric paper blue when it has been reddened by an acid; carbonic acid does not cause a precipitation. It decomposes nitrate of silver, and separates the oxide, which presents a clear olive color, and is entirely soluble in pure nitric acid. The chloruret of platina causes a canary yellow, granulated, pulverulent precipitate, occupying the bottom of the vessel, and adhering to the sides of the glass, whilst soda is precipitated by this re-agent only when it is in a concentrated solution, and then the precipitate is of a reddish yellow, and less adherent to the glass than the preceding. The perchloric acid gives a white precipitate from potass, but does not disturb the aqueous solution of soda.

Diluted Aqueous Solution of Pure Potass.

It turns the syrup of violets green, and restores the blue color to turmeric paper previously reddened by an acid; carbonic acid and nitrate of silver act upon it as on the concentrated solution, provided, at least as far as regards the latter, it be not too diluted. The chloruret of platina and the perchloric acid do not disturb it even at the end of several hours; and as it is indispensable to prove these two qualities, in order to determine the existence of potass in the liquid, this latter must be evaporated, and brought to that degree of concentration which will enable these two re-agents to act upon it. These proofs will be amply sufficient to demonstrate the existence of potass, and it would be useless to have recourse to the carbazotic acid, recommended by some authors. Nor is there any necessity to push the evaporation to dryness, and to calcine the product in a silver crucible, as M. Devergie advises, with the view, he says, of volatilising the ammonia and its compounds, if they exist, while, if the potass be pure, and he supposes it to be so, it cannot contain any ammoniacal compound.

Potass with Lime (Pièrre à Cautére).

This contains, besides the pure potass, a certain quantity of lime, sulphate of potass, chloruret of potassium, silicic acid, alumine, and oxyde of iron and manganese. It differs from the potass purified by alcohol, first, because it gives with the nitrate of silver a precipitate of olive oxyde of silver mixed with the white chloruret of silver; in fact, if a few drops of pure nitric acid be added, the oxyde is dissolved, and the chloruret remains in the form of white, heavy grains; secondly, because the nitrate of barytes yields a white precipitate of sulphate of barytes, insoluble in water and in cold or boiling nitric acid; thirdly, because it gives a white precipitate of oxalate of lime with the oxalate of ammonia. I may add, that it is not uncommon to see the potass with lime of a brown, yellow, or reddish color.

Potassa of Commerce.

These contain a quantity of the carbonate of potass (the sub-carbonate), varying from 40 to 65 per cent., besides the other matters spoken of in the last article, with the exception of the lime. The potass of Germany rarely contains more than from 40 to 45 per cent. of the carbonate, whilst that of America has 65, and that of Russia from 55 to 60. They are like the potassa cum calce in their behaviour with the re-agents, excepting that they effervesce with the weak acid, with a disengaging of the carbonic acid gas, and that no precipitation takes place with the oxalate of ammonia.

Potass, purified with Alcohol, mixed with Red Wine.

A few drops of this alkali are sufficient to impart a deep green tint to red wine; it is, therefore, impossible that such a mixture could be given as wine, but it might happen that the chemist should have to seek for potass purified with alcohol in a vomited liquid, or one found in the digestive apparatus, after the patient had drank some wine. It is, therefore, important to ascertain whether the processes recommended to discover the potass in these cases ought not to undergo some modifications. If two grains of this alkali are dissolved in 125 scruples of red wine, previously neutralised by three grains of the same alkali, and the liquid filtered, it will be found to be of a blueish green color, that it will turn blue turmeric paper, reddened by an acid, and that the

chloruret of platina and the perchloric acid will restore the red color of the wine, without causing any precipitate. At the end of a few hours the last-named of these re-agents induces a blackish deposit.

These characters, as may be seen, are not sufficient to demonstrate the presence of pure potass in this mixture. This may be attained by evaporating the liquid to dryness, and by slaking the dry and cold product for several minutes in concentrated alcohol, of 44° of the areometer; the liquid is then filtered, and evaporated to dryness, heat being applied continuously until the product is slightly carbonised; it is then treated with boiling distilled water; the filtered liquor, of a brownish yellow color, restores the blue color of reddened turmeric paper, and has a canary yellow and white precipitate, like potass from the chloruret of platina and the perchloric acid. If, instead of treating it with water, the chloruret of platina were added to the alcoholic solution, a mistake might happen, because concentrated alcohol alone will give a canary yellow precipitate with this chloruret, which might give rise to the belief in the existence of potass; the precipitate, in truth, is neither granulated nor adherent to the glass.

By a comparative experiment—that is, by treating in the same way 250 scruples of red wine (double the quantity used in the previous experiment), without the addition of any potass—we find that not an atom of potass can be obtained from the aqueous solution. This negative result is in perfect accordance with theory, because we know that the bitartrate and sulphate of potass, that may be contained in the wine, are not soluble in cold alcohol of 44°.

But, it may be observed, in adopting this process, the potass changes the bitartrate of potass of the wine into a neutral tartrate, soluble in alcohol of 44°; so that after the incineration of the alcoholic solution, we obtain not only the potass which rendered the wine alkaline, but also that which formed part of the bitartrate, and that which was added to change the latter into a neutral tartrate. This is, however, of no consequence, as it is not necessary to indicate the quantity of potass added to the wine, but to show that it has been added sometimes, and, with this object solely in view, the plan I have recommended is perfect.

Mixture of Pure Potass and the Alimentary Fluids, with the Matters Vomited, or with that found in the Digestive Apparatus, the Potass having disorganised the Tissues of the Canal.

It is well known that sugared water, tea, coffee, albumen, gelatine, bouillon, bile, and the blood, are not rendered turbid by this alkali, which, on the contrary, renders them more fluid; the tissues of the digestive canal are speedily softened, and changed into a liquid pulp.

Before describing the process which appears to me to be the best adapted to discover potass in these mixtures, I think it necessary to narrate a certain number of experiments instituted with the view of ascertaining its importance.

First Experiment.—I mixed equal parts of potass purified with alcohol, the neutral tartrate of potass, the sulphate of potass, and the chloruret of potassium, the mass weighing ten grains. I dissolved it in water, and evaporated to dryness. The product was divided into two equal parts; one was shaken for ten minutes in cold alcohol, 44°; the other was treated for the same time with the same menstruum in a boiling state. The two solutions evaporated separately to dryness furnished products which I dissolved in a small quantity of boiling distilled water; the solution restored the blue of reddened turmeric paper, and contained free potass, as was shown by the perchloric acid and the chloruret of platina. They were not rendered turbid either by the salts of barytes or by the salts of silver, so that they did not contain an atom of the tartrate or sulphate, nor of the chloruret of potassium. These salts, therefore, remained entirely in the residuum of the treatment by alcohol.

I then poured pure cold acetic acid, diluted with three times its weight of water, on a mixture of equal parts of the nitrate and sulphate and of the chloruret of potassium, previously dissolved in distilled water, and evaporated to dryness; at the end of half an hour I filtered the acetic solution, and ascertained, by means of lime water, the chloruret of barium, and the nitrate of silver, that it contained the tartrate and sulphate, and the chloruret of potassium in solution.

Second Experiment.—After having saturated 100 scruples of milk, as many of broth, human bile, and coffee, with the purified potass, I added one grain of the same alkali. The liquor evaporated to dryness gave a brownish product, which I boiled for two or three minutes with alcohol at 44°; the alcoholic solution filtered, and evaporated one-fourth, was of a brown color, and restored the blue color of reddened paper; filtered again, and brought into contact with the chloruret of platina and the perchloric acid, it gave precipitate of potass so colored and mixed with organic matters, that it was impossible to decide whether there was or was not free potass in the liquid submitted to examination.

Third Experiment.—The same experiment was repeated, but the alcohol was used cold. The brown alcoholic liquid, evaporated to dryness, gave a product, which was carbonised and incinerated in a silver crucible; the ashes, treated with cold alcohol at 44°, furnished a solution, which, having been filtered and concentrated by heat, restored the blue tint of reddened paper. It was evaporated to dryness; the product dissolved in a little water was precipitated white by the perchloric acid, and a canary yellow by the chloruret of platina. This last deposit was hard, granulated, and adherent to the glass.

Fourth Experiment.—The alimentary matters, exhausted by alcohol, as has just been said, were brought into contact for twelve hours with pure cold acetic acid, diluted with three parts of water, in order to affect that portion of potass which had passed to the state of carbonate or of soap, and which the alcohol had not dissolved. I then boiled the mixture for four or five minutes, and filtered; the solution of a brown color, evaporated to dryness, was incinerated in a silver crucible. The ash, treated for several minutes with boiling distilled water, gave a solution containing potassa, the carbonate of potass (this latter was formed during incineration), and some other salts. On concentrating the filtered liquid I became assured that it was alkaline. I then boiled it for a quarter of an hour with a few grains of a pure milk of lime made with distilled water, with the view of bringing

back to the state of potass the carbonate of potass that was in the liquor. I filtered this, and evaporated it to dryness; the product of the evaporation, shaken for twelve or fifteen minutes with cold alcohol at 44°, gave me a solution, which I filtered and evaporated; a few drops poured on this were sufficient to dissolve the pure potassa, and the liquid restored the blue of reddened paper, and gave with the chloruret of platina and the perchloric acid, when it was sufficiently concentrated, the clear and characteristic precipitates obtained from the purified potass.

This experiment repeated with the same quantity of alimentary matters, exhausted by alcohol, but without the addition of pure potass, gave at last an alkaline product containing soda, not potass; in fact, the aqueous solution of the residuum restored the blue of reddened paper, but was not rendered turbid by the chloruret of platina or by the perchloric acid.

Fifth Experiment.—I have often dried a mixture of a quart of broth, a pint of milk, as much coffee, and all the bile contained in a gall-bladder; the product, without the addition of potass, after having been macerated for a quarter of an hour in cold alcohol of 44°, was shaken in the liquid, and boiled for a few minutes, filtered, and the alcohol evaporated in a porcelain capsule, until carbonisation took place, and smoke was no longer disengaged. I then detached the carbon with a clean knife; this carbon brought into contact with reddened turmeric paper slightly moistened, did not turn it blue. I then incinerated it in a silver crucible, and boiled the ashes for several minutes with concentrated alcohol; the filtered solution had no action on the reddened paper; I then evaporated to dryness, and treated the residuum with a few drops of distilled water; the solution did not change the color of the paper; concentrated, and brought into contact with the chloruret of platina, it was not rendered turbid. The matter remaining in the crucible, not dissolved by the alcohol, was treated with a little boiling distilled water; it was filtered, and the liquid slowly restored the blue tint of the reddened paper; but it was not precipitated by the chloruret of platina, nor by the perchloric acid.

The alimentary mass dried and treated with alcohol, was left for twelve hours in pure acetic acid, diluted with three or four parts of distilled water, then boiled for several minutes; the filtered liquid, of a reddish brown color, was evaporated in a porcelain capsule until it was carbonised, and no longer disengaged smoke; the carbon, brought into contact with reddened turmeric paper slightly moistened, gave it a deep blue color; incinerated in a silver crucible, and the ash treated with boiling concentrated alcohol, gave a solution, which was filtered, and which was not alkaline by the turmeric test; the residuum obtained by evaporation to dryness of this solution was submitted to the action of boiling distilled water; the liquid did not restore the blue of reddened paper, and there was not any precipitate from the chloruret of platina or the perchloric acid. The portion of the ash not dissolved by the alcohol was treated with boiling distilled water, and the liquid filtered; this latter rendered the red paper blue, and was precipitated by the chloruret of platina and by the perchloric acid, as would be a solution of the carbonate of potass. Does this ash contain a certain quantity of soda, independent of the potass? There is every reason to believe it does.

Sixth Experiment.—After having saturated with pure potass an alimentary mass, weighing a kilogramme and a half, and composed of milk, broth, coffee, bile, and 300 scruples of red wine, I added two grains of purified potass. This mixture was evaporated to dryness, and treated for two or three minutes with boiling alcohol of 44°; the residue not dissolved by the alcohol was submitted to the action of diluted acetic acid; the two liquors evaporated, carbonised, and incinerated separately, left ash, which, submitted to the action of concentrated alcohol, as has been said in the third and fifth experiments, gave pure potass, whilst a similar mixture, treated in the same way, without the addition of potass, did not yield any traces of it.

Seventh Experiment.—The preceding mixture, saturated with pure potass, with the addition of one grain of this alkali, was evaporated; the dry product was treated with boiling concentrated alcohol, the solution filtered and evaporated to dryness; the residue dissolved in distilled water, and the solution submitted to the action of a current of chlorine gas, as M. Devergie advises, when the liquid was deprived of its color, and filtered, to separate it from the numerous white flakes which had been formed during the action of the chlorine, and then concentrated by evaporation; it increased greatly the redness of the turmeric paper, instead of restoring its blue tint, and gave with the chloruret of platina a canary yellow precipitate, resembling that afforded by the salts of potass.

M. Devergie looks upon the presence of the salts of potass in certain vegetable and animal liquids as a difficulty inherent to this mode of operation; we cannot share his fears, as far as regards the salts most frequently present in these liquids, because, even if they were present in a notable quantity, they would not be soluble in alcohol of 44°, excepting always the acetate, which might perchance be present in the liquid, and which is soluble in alcohol. We shall examine hereafter the inconveniences resulting from the presence of this salt, contenting ourselves with stating at present, that we do not adopt the use of the chlorine, because it gives the potass as a salt, and that it is possible, by other means, to obtain it in the state of a pure caustic alkali.

Eighth Experiment.—I have several times given 2½ or 3 scruples of the purified potass, dissolved in 80 or 100 scruples of water, to dogs fasting, and to others who had eaten freely an hour or two previously, and have then tried the œsophagus, to prevent vomiting. The animals have died in from twenty to twenty-four hours. I then collected all the matters contained in the stomach, and washed it with distilled water; next mixing the water used in washing the stomach with the partly digested food, I ascertained that reddened turmeric paper quickly assumed its blue color when touched with the liquid. The mixture was next heated for twenty minutes, and filtered. The liquid I shall speak of as A, the solid matter as B. A, evaporated to dryness in a porcelain capsule, and treated with boiling alcohol of 44°, gave a solution, which, filtered while boiling, restored the blue of reddened turmeric paper; it was then evaporated until it became carbonised, and no longer gave out any smoke; the carbon, brought into contact with

reddened paper, slightly moistened, changed it to blue. A portion of potass had evidently been dissolved by means of the organic matters. I incinerated the carbon in a silver crucible; the ash, treated with concentrated boiling alcohol, gave a liquid which did not turn the reddened paper blue, because during incineration the potass had passed to the state of carbonate, insoluble in alcohol; the residue, not dissolved by this menstruum, was strongly alkaline; dissolved in water, it readily imparted the blue color to reddened paper, and gave abundant precipitates, with the chloruret of platina and the perchloric acid, similar to those obtained from the carbonate of potass; this residue also effervesced with acids.

That portion of A not dissolved by the boiling alcohol, having been left for an hour in pure acetic acid, diluted with three times its weight of water, was then heated to ebullition; the filtered liquid, of a reddish brown color, was evaporated in a porcelain capsule, until it was carbonised, and did not give out any smoke; the carbon was very alkaline in its action on paper. I easily detached it with the blade of a knife, in order to incinerate it in a silver crucible. The ash, treated with concentrated boiling alcohol, gave a solution, which did not turn reddened paper blue; the ash remaining after the action of the alcohol was exhausted by boiling distilled water, and the liquid filtered; the solution had a powerful alkaline influence on the reddened paper, and the chloruret of platina and perchloric acid afforded very slight precipitates, similar to those which a weak solution of carbonate of potass would give.

B—that is to say, the solid matters obtained after having boiled the contents of the stomach for twenty minutes—was treated with concentrated boiling alcohol; the filtered liquid was shown to be alkaline by its action on the paper; it was evaporated in a porcelain capsule until it became carbonised, and did not yield any smoke; the carbon gave a blue color to reddened paper; incinerated in a silver crucible, the ash, treated with boiling alcohol, gave a solution, which did not restore the blue to reddened paper, even when it had been concentrated by evaporation; the ash residue, on which the alcohol had acted, having been treated with boiling distilled water, gave a solution, which, when concentrated, rendered the paper blue, and gave abundant precipitates with the chloruret of platina and perchloric acid, similar to those from the carbonate of potass.

B, the residue exhausted by the alcohol, after having been macerated an hour in pure acetic acid, diluted with three times its weight of water, was boiled; the filtered liquid, of a brown color, was heated in a porcelain capsule, until it became dry and carbonised; the carbon rendered blue the reddened paper, previously slightly moistened; incinerated in a silver crucible, the ash, treated with boiling alcohol, did not yield up anything to that menstruum, whilst boiling distilled water dissolved all the alkali it contained; the solution powerfully affecting the reddened paper, concentrated, and brought in contact with the chloruret of platina and the perchloric acid, no precipitation ensued.

Ninth Experiment.—All the preceding experiments were repeated, substituting the potassa cum calce for the purified potass, and with the same results.

Tenth Experiment.—I gave a dog fasting 4 scruples of potassa cum calce, dissolved in 130 scruples of water, and I tied the œsophagus. The animal died six hours afterwards, and was immediately opened. The liver, spleen, and kidneys were immediately removed (the alimentary canal remaining intact), cut into pieces, and placed in a porcelain capsule with distilled water; the liquid was boiled for an hour, and then filtered; the solution did not appear to have any action on reddened paper; it was evaporated to dryness, and as soon as it was rather concentrated, it showed a slight influence on the test paper. The solid product thus obtained, after having been shaken for ten minutes with cold alcohol of 44°, was boiled for six or seven minutes, the boiling liquid filtered, and evaporated in a porcelain capsule, until it was carbonised, and no longer gave out any vapour; the carbon, touched with reddened and slightly moistened paper, restored its blue color; it was then removed from the capsule, and incinerated in a silver crucible; the ash, treated with boiling water, gave a solution, which, having been filtered and concentrated by evaporation, acted strongly on the test-paper, and gave a precipitate with the chloruret of platina and the perchloric acid, like the carbonate of potass.

The liver, spleen, and kidneys of a healthy dog, treated with boiling water, alcohol, &c., as has just been stated, gave an alkaline ash, in which it was impossible to discover the slightest trace of potass by the chloruret of platina or the perchloric acid.

Eleventh Experiment.—Being desirous of ascertaining whether the alcohol and the acetic acid would act on the carbonate of potass as on the caustic potass, I instituted another series of experiments. I mixed two grains of solid carbonate of potass with as much neutral tartrate of potass, sulphate, and chloruret of potassium; this mixture having been dissolved in water, and evaporated to dryness, I poured diluted acetic acid on the product, until effervescence ceased, and then filtered it, and evaporated to dryness; the acetate of potass obtained was dissolved in cold alcohol of 44°. At the end of half an hour I filtered again, and evaporated to dryness; the product was heated in a silver crucible for several minutes, until it was well carbonised; the carbon was frequently treated with cold concentrated alcohol, which was filtered, and evaporated to dryness; the residue contained pure, caustic potass; the carbon, exhausted by the alcohol, and submitted to the action of cold water, gave a colorless alkaline liquid, in which the chloruret of platina and the perchloric acids gave precipitates similar to those from the carbonate of potass. This salt, then, had evidently been produced during the carbonisation of the acetate.

Twelfth Experiment.—I mixed four grains of solid carbonate of potass with a quart of milk, bouillon, bile, and coffee, previously saturated with the same salt. After having evaporated to dryness, I shook the solid product for a quarter of an hour in cold alcohol of 44°, and then boiled it for two or three minutes; the liquid filtered, and treated as has been said of the third experiment, gave caustic potass; the carbonate of potass had then been partly dissolved. The part not dissolved by the boiling alcohol was left for twelve hours in contact with diluted acetic acid, which slightly effervesced with it; it was then filtered,

and the brown liquid was submitted to the same process as in the fifth experiment, and furnished a notable quantity of pure potass; the chloruret of barium did not produce any precipitate, but the nitrate of silver gave a slight white precipitate of the chloruret of silver.

A mixture similar to the preceding, but without the carbonate of potass, did not yield potass to the alcoholic treatment, and gave to the acetic acid an alkaline residue of potass, and probably soda, analogous to that which I had from the fifth experiment after the acetic treatment.

The following results are drawn from the preceding facts:—

1. That very concentrated boiling alcohol dissolves a notable portion of the purified potass, or potassa cum calce, which may be found in a solid organic mixture, either in its caustic condition, or as soap, or in any other combination with vegeto-animal matter, and that it does not sensibly dissolve the salts of potass naturally contained in this mixture, nor those which may have been accidentally introduced into the stomach as medicines, except the acetate.

2. That it equally dissolves a certain quantity of the carbonate of potass, which may have been added to the mass with the view of poisoning, or which may have been formed as the result of the action of the carbonic acid of the air on the caustic potass, or of the decomposition of organic matters by this alkali (*vide* twelfth experiment). Nevertheless, the carbonate of potass is completely insoluble in concentrated alcohol, so that we must conclude the solution in question to have taken place, aided by the combination of the salt with a portion of fat or other organic matter.

3. That the solid organic mixtures to which neither potass nor its carbonate has been added, even when they are abundant, and naturally contain salts of potass, such as the lactate, acetate, tartrate, sulphate, phosphate, or chloruret of potassium, treated with boiling concentrated alcohol, do not yield to this menstruum sufficiently evident portions of these salts, that their presence in the alcoholic solution could be demonstrated by the chloruret of platina or the perchloric acid, re-agents which readily discover traces of free potass or its carbonate in the alcoholic solution, whenever this alkali has been mixed with the food. That if the normal alcoholic liquids in question, treated in the manner adopted in the fifth experiment, give at last a slightly alkaline residue, which, after a certain time, restores the blue of reddened paper, it is doubtless owing to their containing a small quantity of soda, or else so small a proportion of potass as to avoid the action of the chloruret of platina and the perchloric acid.

4. That if pure acetic acid, diluted with three times its weight of water, be heated with a solid organic mass, to which potass or its carbonate has been added, and which has been already exhausted by boiling concentrated alcohol, can dissolve, in certain cases, a portion of the potass or carbonate left unacted on by the alcohol, it equally dissolves many salts of potass naturally contained in the organic mass, so that it becomes difficult, if not impossible, to decide, when the operations are terminated, whether the alkali obtained has been added, or is procured from some of the salts of potass found in organic matters in their natural condition, and which the acetic acid may have dissolved or decomposed (*vide* twelfth experiment).

5. That it is right to reject the use of chlorine, proposed by M. Devergie to destroy the animal matter, which might mask the potass, because, if this gas be passed into an alcoholic solution, resulting from an organic liquid, with the addition of potass, evaporated to dryness, and treated with concentrated alcohol, or to a solid matter exhausted by alcohol, as Devergie advises, the potass is never obtained in its caustic state, but either as a salt, or in a solution which, instead of being alkaline, is strongly acid; and besides, when the solid matter is treated with chlorine, by means of the chlorine and of the hydrochloric acid which are formed, a notable quantity of some of the salts of potass naturally contained in the solid mass is dissolved. In the latter case, the objection made to acetic acid at once applies. Devergie, it is true, does not place his entire confidence in this process; for he says, at page 310 of the third volume of his work on Forensic Medicine, "We must, however, acknowledge many difficulties inherent to this mode of analysis, and to the conclusions drawn from it. First, Certain vegetable and animal liquids contain salts of potass; but, then, these salts being neutral, the liquid does not show any alkaline re-action. Secondly, The potass that has been added may pass to the state of a carbonate; it is, then, impossible to state from analysis whether the potass was originally the caustic potass or a carbonate; some animal liquids are entirely alkaline, but as they owe their alkalinescence to soda, they are not precipitated by the chloruret of platina, unless they contain the sulphate of potass besides, and then the chemist must form his opinion from the quantity and abundance of the precipitates he obtains from the re-agents." The reasons thus alleged to show the difficulties inherent in this mode of analysis require to be examined with care, in order to place them in the clearest light. M. Devergie fears the salts of potass, which are naturally found in certain vegetable and animal liquids. There he is in error; for he has advised, as we have done before him, to treat these liquids, evaporated to dryness, with alcohol. Now, we know from the fifth experiment, that if this agent is concentrated to 44°, it will not take up enough of these salts for a precipitate by the chloruret of platina and the perchloric acid; however, to avoid confusion, he adds, these salts being neutral, the liquid will not give any alkaline re-action. In order to show M. Devergie how much he is in error, we will admit that some atoms of soda have been added to the vegetable and animal liquids containing the salts of potass, as he supposes; and we will admit also, although it is not the case, that these liquids, evaporated to dryness, and treated at first with concentrated alcohol, afterwards with chlorine, contain a sufficient quantity of the salts of potass to precipitate with the chloruret of platina and the perchloric acid. It is evident the liquid will have an alkaline re-action, and will give the potass precipitate with the salt of platina and the perchloric acid. According to M. Devergie, we might credit the existence of free potass; and yet in these is only a little soda and salts of potass in the suspected liquid. Devergie says also, against the use of chlorine, that the potass may have passed to the state of carbonate,

and then it will be impossible to discover by analysis whether the alkali was added in its caustic form, or as a carbonate. Although this remark is correct, it has very little bearing, as I shall show lower down, when examining whether it is really possible to determine, in an analysis of this kind, in what state the potass was administered. As far as regards the natural existence of an alkali in certain animal liquids, as stated by Devergie, we do not acknowledge there is a serious difficulty, when these liquids contain sulphate of potass, besides the free soda; nor that it is requisite in such a case to decide according to the abundance of the precipitates obtained from the re-agents. In forensic medicine, we must avoid as much as possible solving the problem of a case of poisoning by the abundance or the traces of a precipitate, because that which might appear abundant to one chemist might be trifling to another. We must obtain an incontestable result; we must draw from a given matter a poisonous substance, which will not be furnished when the same matter has not been previously mixed with it; then there is proof the poison has been added. Besides, we repeat, that in the present instance the sulphate of potass cannot be a cause of difficulty, because it is insoluble in concentrated alcohol; and that the examination in question has reference to liquids evaporated to dryness, and treated with concentrated alcohol, before being submitted to the action of chlorine.

6. That potass dissolved in water, and introduced into the stomach, is absorbed, and carried into the different organs, where it can be found.

Process of Analysis.

We may now turn our attention to the process to be adopted to discover the potass in a case of poisoning by it. It must first be ascertained whether the suspected matter restores the blue color of paper reddened by an acid, and whether it gives forth an ammoniacal odor; this character is very important, for if the liquid is strongly alkaline, and does not contain any free ammonia or its carbonate, we may conclude that it contains either potass, soda, barytes, strontian, or lime. The liquid and solid mass, or the tissues of the alimentary canal, are to be introduced into a glass retort, after having been diluted with a certain quantity of distilled water; a receiver, containing a little water and covered with cold rags, is next to be adapted to the retort, to which heat is to be applied until the liquid contained is reduced to one third its volume; the liquid thus concentrated is next to be tested with the reddened paper; it may be that, after distillation, this fluid will not be any longer alkaline, if its alkaline essence depended on a certain quantity of ammonia, or its carbonate, which would be volatilised into the receiver; the alkaline essence of the distilled liquid must next be tested, and if it prove so it must be preserved, to ascertain if it contain free ammonia or the carbonate. The third of the matter remaining in the retort, which we will suppose to be alkaline, must be evaporated to dryness at a gentle heat in a porcelain capsule; when the product is cold, it is to be shaken for eight or ten minutes in pure concentrated alcohol of 44°, and caused to boil for five or six minutes, alcohol being added as it evaporates; the liquid is to be decanted and filtered into another porcelain capsule. The mass is to be again treated with boiling alcohol, in order to exhaust it, and extract all that this menstruum can dissolve; the alcoholic solution filtered and mixed together, must be evaporated to dryness in the capsule. The alcohol, in this operation, dissolves the free caustic potash, that which has been changed into soap, a part of that which has combined with the organic matters besides the fat, and finally a notable portion of the carbonate of potash contained in the mass — either because this salt has been mixed with it, or because the caustic potash may have passed to the state of carbonate, as a result of its action on the carbonic acid in the air, or on that which may have formed during the act of evaporation. The solubility of carbonate of potass in concentrated alcohol, aided by organic matter, cannot be denied after the twelfth experiment, previously narrated. If the alcoholic liquids were allowed to get cold before they were filtered, or if they were collected in a test-glass and allowed to cool in it, there would be deposited on the sides of the capsule or glass, a fat, soapy matter, containing a portion of potash, and it would be requisite, in order not to lose this, to detach this matter carefully, in order to mix it with the liquid; it is better, therefore, to proceed as I have indicated; it is of equal advantage to wash the funnel through which the liquids are filtered. The alcoholic solution evaporated to dryness, must still be heated in the porcelain capsule, until it is carbonised, and no longer emits any vapors; in this state it will be readily separated from the capsule with the blade of a clean knife, which could not have been done if the heat had not been carried to carbonisation. The carbonised product must be incinerated in a covered silver crucible; from half an hour to three quarters, at a red heat, will be generally sufficient to produce incineration. Platina, or earthy crucibles, must not be used, as the potash would act on them. The crucible having cooled, the ash must be brought into contact with cold alcohol at 44°, stirred with a glass rod for several minutes, and then boiled in the crucible; this liquid, when cold, to be decanted, filtered, and evaporated to dryness at a gentle heat; during the evaporation, it is to be tested by the reddened paper. This solution in general is not alkaline, because the potash has been changed into the carbonate by the process of incineration, and scarcely any sensible residuum is obtained. There are, however, circumstances where the proportion of potash dissolved by the alcohol is considerable, with respect to that of the organic matters found in the alcoholic solution; then a portion only of the potass was passed to the state of carbonate during incineration, and the alcohol readily dissolves that part of the alkali which remains caustic. Let us admit that it is so, and that a residue has been obtained on evaporating the alcoholic solution; it must be dissolved in a little distilled water, the alkalinescence of the liquid must be proved by the test-paper, the solution concentrated by heat, and the fact ascertained by trying it in test-tubes, that it yields the potash precipitates with the chloruret of platina and the perchloric acid. However this may be, the ash remaining in the crucible after the alcoholic treatment must be boiled in a little distilled water, in order to dissolve the carbonate of potash formed during incineration, and the liquid filtered and

evaporated until it is sufficiently concentrated; in this state it will easily restore the blue color of reddened paper, and will give abundant precipitates with the chloruret of platina and the perchloric acid, as would a concentrated solution of the carbonate of potash. The use of these re-agents would be accompanied even with a well-marked effervescence.

I should not recommend pushing the experiment further, and treating, for example, the mass already exhausted by alcohol with water or acetic acid, because, while acknowledging that by their means we might dissolve a certain quantity of potash, which had been used as a poison, it is certain that we should also dissolve a considerable quantity of the salts of potash naturally contained in the animal liquids and in food, so that we should run the risk of committing serious errors, in attributing to potash taken as a poison, re-actions due to the salts of potash naturally in the system. It were a hundred times better not to seek to separate the entire of the potash which has acted as a poison.—*Journ. de Chimie Médicale.*

CASE OF MONSTROSITY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen, — If you think the following case worthy of record in your valuable Journal, I shall be gratified by its insertion.

I am, Gentlemen,
Your obedient servant,
W. B. Sanderson.

Ipswich, June 27, 1842.

November 29, 1841. I was called to Mrs. L., aged thirty-six, who has been married fourteen years, and was in labour of her first child. I found the os uteri well dilated, and the membranes protruding largely, through the volume of which I was unable to ascertain the presentation. I, therefore, ruptured them, and a large quantity of the liquor amnii escaped; when, on several further examination, with much puzzling and difficulty, I diagnosed an acephalous fœtus, by feeling the craggy edges of the base of the cranium, surrounding a soft, pulpy mass, which occupied the site of the brain. This proved a correct opinion on delivery, when I received a complete monstrosity, presenting the extraordinary aspect of two distinct and perfect faces, united to one cranial base, and possessing four perfect and lucid eyes, two noses, two mouths, each divided by a septum, with a separate tongue and gums, and two chins; the rest of the body normal, well formed, and of good average size; one ear only on each side of the cranial base.

On viewing the posterior part of the trunk, I observe (for I possess the curiosity) the spinal column deficient in the spinous processes of the vertebræ, the chord and its membranes exposed superficially, and the transverse processes widely separated throughout their whole length, until they unite at the sacrum.

On opening the thorax and abdomen, I found their contents perfectly normal. I did not trace the faucial, œsophageal, or bronchial formations, being unwilling to disfigure my preparation so much as such an investigation would involve.

I may add, it is a female child, and the mother felt its powerful movement a short time prior to delivery. Respiration never occurred.

ON SPONTANEOUS FRACTURE OF THE THIGH-BONE.

By Jonathan Toogood, Esq.
Senior Surgeon to the Bridgwater Infirmary.

In the course of my practice, two cases have occurred in which the thigh has been fractured without any external violence. The first was that of a man who had for many years been in a weak, nervous, and half paralytic state. In attempting to turn in bed, the bone broke. The case was considered an extraordinary one; it was treated in the usual way, and united after a considerable time, and he lived many years after. The next case was that of James Pople's wife, of Bawdrip, aged fifty-five, who had been long in an infirm state of health, which terminated ultimately in paralysis of the lower extremities. She had suffered very severe pain in her right thigh for some months, which was considered by those about her to be rheumatic; and being a poor woman without friends, little was done for her relief. One evening, on being lifted up in the bed, the bone suddenly snapped; she was aware of it immediately, and cried out that her thigh was broken, but no one believed her, and she lay all that night in dreadful agony, but when, on the following morning, her neighbours saw the limb almost doubled by the violent spasmodic action of the muscles which drew the ends of the bones forcibly against each other, I was requested to see her. Her condition was indeed truly deplorable, and the grating of the bones against each other was distinctly heard.

The limb was placed in splints, and united after a longer period than usual. I mentioned this case to Sir Astley Cooper, who considered it to be cancer of the bone, and directed my attention to the state of the breasts, in both of which I discovered on examination several hard, knotty tumors, of a carcinomatous character.

The following interesting account of a similar accident will be found in the life of Archbishop Secker:—

"About a year and a half before he died, after a fit of the gout, he was attacked with a pain in the arm, near the shoulder, which, having continued about a twelvemonth, a similar pain seized the upper and outer part of the opposite thigh, and the arm soon became easier. This was much more grievous than the former, as it quickly disabled him from walking, and kept him in almost continual torment except when he was in a reclined position. During this time he had two or three fits of the gout, but neither the gout nor medicines alleviated these pains, which, with the want of exercise, brought him into a general bad habit of body.

On Saturday, the 30th of July, 1768, he was seized, as he sat at dinner with a sickness at his stomach. He recovered himself before night, but the next evening, whilst his physicians were attending, and his servants raising him on his couch, he suddenly cried out that his thigh-bone was broken. The shock was so violent that the servants perceived the couch to shake under him, and the pain so acute and unexpected,

that it overcame the firmness he so remarkably possessed. He lay for some time in great agonies, but when the surgeons arrived, and discovered with certainty that the bone was broken, he was perfectly resigned, and never afterwards asked a question about the event. A fever soon ensued; on Tuesday he became lethargic, and continued so till about five o'clock on Wednesday afternoon, when he expired with great calmness in the 75th year of his age.

On examination, the thigh-bone was found to be carious about four inches in length, and at nearly the same distance from its head. The disease took its rise from the internal part of the bone, and had so entirely destroyed its substance, that nothing remained at the part where it was broken but a portion of its outward integument; and even this had many perforations, one of which was large enough to admit two fingers, and was filled up with a fungous substance, arising from within the bone. There was no appearance of matter about the caries, and the surrounding parts were in a sound state. It was apparent that the torture which his grace underwent during the gradual corrosion of this bone, must have been inexpressibly great. Out of tenderness to his family he seldom made any complaint to them, but to his physicians he frequently declared his pains were so excruciating, that unless some relief could be procured he thought it would be impossible for human nature to support them long; yet he bore them for upwards of six months with astonishing patience and fortitude, sat up generally the greater part of the day, admitted his particular friends to see him, mixed with his family at the usual hours, sometimes with his usual cheerfulness, and except some very slight defects of memory, retained all his faculties and senses in their full vigour till within a few days of his death."

In the second part of the 15th vol. of the Medico-Chirurgical Transactions, two cases of fracture of the thigh-bone taking place, without any violence, in connection with cancer, are related by Mr. Salter, of Poole, in one of which an examination was afforded after death, and his description of the condition of the bone corresponds very much with that of the preceding case. I regret that no examination could be obtained in the case of James Pople's wife.

DISLOCATION OF THE HIP, WITH FRACTURE OF THE ACETABULUM.

By Mr. Toogood.

Thomas Rich, a sawyer, aged thirty, fell into a sawpit from a piece of timber, and received a violent blow on the hip from the heavy body which followed him. The head of the thigh-bone was thrown on the dorsum of the ilium, and the dislocation was reduced in the usual way without much difficulty. On the following evening it was evident that the head of the bone was not in its proper situation; the limb was shortened and somewhat inverted, presenting just the appearance of a dislocation into the ischiatic notch. Moderate extension, however, easily brought the leg of equal length with the other, and the whole limb to a natural state. He had retention of urine. The next day the limb was found again shortened, and although there was great swelling from the violent contusion which so heavy a body had occasioned, an accurate examination satisfied me that the head of the bone was still lying on the dorsum of the ilium. I was not present when the dislocation was reduced, but the surgeons who attended the patient were positive that they heard the bone return to its socket, and their opinion was confirmed by the patient and the bystanders. A careful examination was again made, when a fracture of the acetabulum was detected, which allowed the head of the bone to escape, and explained at once the cause of the limb presenting such different appearances. There was not the slightest difficulty in returning the bone to its natural position, but it was no easy matter to keep it there. This, however, was effected by fixing the pelvis, and keeping up permanent extension by means of a pulley. By persevering in this plan for several weeks the patient perfectly recovered the use of the limb.

I have frequently employed permanent extension by the pulley, in cases of very oblique or complicated fractures of the thigh, with the best effects, and particularly in one I attended about a year since, in which the shaft of the bone was broken in three different places, so that it was impossible to keep the limb right in any other way. The patient has an excellent limb, without any deformity.

Bridgwater, June, 1842.

ARTIFICIAL PREMATURE LABOR.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—If you think any useful hints will be given, or any practical suggestions offered to the profession, by republishing a case in which Dr. Lee induced abortion, together with a case which lately occurred in my own practice, I will trouble you to give them a place in your Journal.

Yours, &c.,
W. Allison.

In the "Lancet," June 18, 1842, at page 413, a case is related in which the membranes of the ovum were punctured in the fourth month of pregnancy, to arrest fever, epigastric pain, and incessant vomiting; immediately after which the fever and pain subsided and the vomiting ceased, though the fœtus was not expelled until after several weeks.

Case.—Mrs. J., of Retford, a delicate woman, aged 33, miscarried (about the sixth week) towards the end of 1841. In January, 1842, she became pregnant of her fourth child; I first saw her on that occasion on the 10th of January, on account of a colored discharge, with debility. The hæmorrhage returned frequently until the 7th of June, when it became so copious (in the fifth month) as to justify my endeavour to procure abortion. I passed a thick probe through the os uteri and the membranes, until I felt my fingers wetted with the liquor amnii; after which she had a few pains. From that time there was scarcely any colored discharge—merely a frequent oozing of water, with occasional pains. On the 20th, as she became anxious to be relieved from suspense, I passed the probe again without finding that I had increased the watery discharge. On the morning of the 26th, at five o'clock,

a.m., I was sent for, on account of very acute spasmodic pains, which had been almost incessant during the preceding night, when I found the os uteri closed, but so dilatable as to gradually admit of the insinuation of my finger until I felt the child's head; I then introduced a male catheter, and when the end of it came in contact with the head of the child, I passed it round the head and pushed it suddenly and forcibly through the membranes. About a pint of fluid passed off through the catheter, having the appearance of dark-colored and very thick muddy water; I suppose the probe had, on its first or second introduction, occasioned some hæmorrhage into the membranes. About two hours afterwards (at half-past seven o'clock), the whole (living fœtus and placenta) was expelled—nineteen days after the first introduction of the probe.

REMARKS.

I think that, when I had introduced the probe, instead of withdrawing it as soon as I felt a little water on my fingers, I ought to have first made a rent in the membranes.

The similarity, with respect to relief afforded on rupturing the membranes, in Dr. Lee's case, from vomiting, &c., and in my own, from hæmorrhage, appeared to me remarkable; and although I should not often expect the same results, yet these cases show that very great and immediate benefit may be sometimes obtained by artificial interference, and that probably death may be occasionally prevented.

To-day (a week since the miscarriage), Mrs. J. is recovering very satisfactorily.

East Retford, July 4, 1842.

ACADEMY OF SCIENCES, PARIS.

June 27.

URINARY ORGANS OF BIRDS.

Dr. Mayer, of Bonn, presented a memoir on the urinary organs of birds. The object of the author is to show that in the gallinaceæ, for a certain period after birth, there exists a well-developed bladder, which gradually becomes united to and confounded with the cloaca.

ACADEMY OF MEDICINE, PARIS.

June 28.

ANEURISMS.

M. Laugier presented two patients whom he had treated successfully for popliteal aneurism, by the usual method of ligature of the femoral artery. The author asks if it may not be better practice to tie the artery at an early stage of the disease than to wait until the collateral circulation has been established.

ARTIFICIAL PUPIL.

M. Robert presented a medical student, twenty-three years of age, on whom he had successfully operated for artificial pupil. Some years previously he had been wounded in the left eye by a foil; sympathetic inflammation attacked the right eye, and produced atresia of the pupil. Vision was completely destroyed in the left eye, and in the right almost completely gone.

M. Robert, having made an incision, about three lines long, at the outer side of the cornea, with Beer's lance-shaped knife, introduced a very fine hooked forceps, seized the membrane which obstructed the pupil, and, having torn it at the edge, drew it out through the incision, and excised a portion of it. The black circle of the pupil, somewhat elongated transversely, was now seen, with the transparent lens behind it. In four days the wound of the cornea was healed, and in eighteen days the functions of the eye were completely restored. Eighteen months have elapsed since the operation, without any unfavorable change.

ROYAL SOCIETY.

March 17, 1842.

Contributions to the Chemical History of the Compounds of Palladium and Platinum. By ROBERT KANE, M.D.

The author states it to be his object, in this and in some subsequent papers, to examine specially the composition and properties of the compounds of palladium, platinum, and gold; and to ascertain how far they agree, and in what they differ, as to the laws of combination to which these compounds are subjected. He commences with the investigation of the compounds of palladium, employing for that purpose a portion of that metal with which he was furnished by the Royal Society out of the quantity bequeathed to the Society by the late Dr. Wollaston. He describes the mode of obtaining the protoxide of palladium, and enters into the analysis of the hydrated oxide, the black suboxide, and the true basic carbonate of that metal; detailing their properties and the formulæ which express their mode of composition. The chlorides of palladium form the next subject of inquiry; and the author concludes from his experiments that the loss of chlorine which the protochloride undergoes, when kept for some time in a state of fusion at a red heat, is perfectly definite; and also that the loss represents one half of the chlorine which the salt contains. But in the double salts formed by the protochloride of palladium with the chlorides of the alkaline metals, he finds that the similarity of constitution usually occurring between the compounds of ammonium and potassium is violated. From his analysis of the oxychloride of palladium the author concludes that it is quite analogous to the ordinary oxychloride of copper. He then examines a variety of products derived from the action of a solution of caustic potass on solutions of ammonia-chlorides of potassium. Their properties he finds to indicate analogies between palladium and other metals, whose laws of combination are better known. The sulphate, the ammonia-sulphates, the nitrates, and the ammonia-nitrates of palladium, and lastly, the double oxalate of palladium and ammonium, are, in like manner, subjected to examination in a detailed series of experiments.

The second section of the paper relates to the compounds of platinum, and comprehends researches on the composition of the protochloride of platinum; on the action of ammonia on biniodide of platinum; and on the action of ammonia on the perchloride of platinum; in which the properties of these substances are

detailed and the formulæ expressing their composition deduced.

April 7, 1842.

On the Ultimate Distribution of the Air-passages, and the Modes of Formation of the Air-cells of the Lungs. By William Addison, Esq., F.L.S., Surgeon, Great Malvern.

After reciting the various opinions which have prevailed among anatomists regarding the manner in which the bronchial tubes terminate, whether, as some suppose, by cells having free communication with one another, or, as others maintain, by distinct and separate cells having no such intercommunication, the author states that having been engaged in investigating, with the aid of the microscope, the seat and nature of pulmonary tubercles, he could never discover, in the course of his inquiry, any tubes ending in a *cul-de-sac*; but, on the contrary, always saw, in every section that he made, air-cells communicating with each other. He concludes from his experiments and observations, that the bronchial tubes, after dividing dichotomously into a multitude of minute branches, which pursue their course in the cellular interstices of the lobules, terminate, in their interior, in branched air-passages, and in air-cells which freely communicate with one another, and have a closed termination at the boundary of the lobule. The apertures by which these air-cells open into one another are termed by the author *lobular passages:* but he states that the air-cells have not an indiscriminate or general intercommunication throughout the interior of a lobule, and that no anastomoses occur between the interlobular ramifications of the bronchia themselves; each branch pursuing its own independent course to its termination in a closed extremity. Several drawings of the microscopical appearances of injected portions of the lungs accompany this paper.

May 5, 1842.

Additional Observations on Fibre. By Martin Barry, M.D., F.R.S., Lond. and Ed.

On examining coagulating blood, the author finds that it contains discs of two different kinds; the one comparatively pale; the other very red. It is in the latter discs that a filament is formed; and it is these discs which enter into the formation of the clot; the former, or the pale discs, being merely entangled in the clot, or else remaining in the serum. He thinks that the filament escaped the notice of former observers, from their having directed their attention almost exclusively to the undeveloped discs which remained in the serum, and thus conceived that the blood-discs are of subordinate importance, and are not concerned in the evolution of fibrin.

To render the filament distinctly visible, Dr. Barry adds a chemical re-agent capable of removing a portion of the red coloring matter, without altogether dissolving the filament. He employs for this purpose chiefly a solution of one part of nitrate of silver in 120 parts of distilled water; and sometimes also the chromic acid. He admits that the use of these re-agents would, on account of their destructive tendency when concentrated, be objectionable as proofs of the absence of any visible structure; but as the point to be proved is, that a certain specific structure does exist, he contends that the same appearance would not equally result from the chemical actions of re-agents so different as are those of chrome and the salts of mercury and of silver. After the appearance of the filament, thus brought to light, has become familiar to the eye, it may be discerned in the blood-discs when coagulation has commenced, without any addition whatever. Those blood-discs of the newt, which contain filaments, often assume the form of flask-like vesicles, the membranes of which exhibit folds, converging towards the neck, where, on careful examination, a minute body may be seen protruding. This body is the extremity of the filament in question, its protrusion being occasionally such as admit of its remarkable structure being recognised.

The author proceeds to describe various appearances which he has observed in the coagulum of the blood, and which strongly resemble those met with in the tissues of the body, and are obviously referable to a similar process of formation. He bears testimony to the accuracy of the delineations of coagulated blood given by Mr. Gulliver. One of the most remarkable phenomena discovered by the author in the coagulation of the blood is, the evolution of red coloring matter—a change corresponding to that which he had previously observed to take place in the formation of the various structures of the body out of the corpuscles of the blood. He considers the production of filaments as constituting the essential circumstance in coagulation.

He conjectures that the notched or granulated fibres noticed in the blood by Professor Mayer, may have been of the same kind as the flat, grooved, and compound filaments described by himself; but he thinks that in that case, Mayer's explanation of their mode of origin must be erroneous; for they may be seen to be produced by a portion of the blood not mentioned by him—namely, the corpuscles.

Mr. Addison's discovery of globules in the uppermost stratum of inflammatory blood, and of their influence in the formation of the buffy coat, is confirmed by Dr. Barry, who remarks that these globules are altered red blood-discs. That the blood corpuscles are reproduced by means of parent-cells, as suggested by Mr. Owen and by the author, is confirmed by the observations of Dr. Remak; but the author had long ago indicated a division of the nucleus as being more particularly the mode of reproduction, not only of those corpuscles, but of cells in general. With this conjecture the observations of Remak on the blood-corpuscles of the fœtal chick fully accord. Whether the author's further speculation—namely, that the parent-cells are altered red blood-discs, is correct, still remains to be seen.

The phenomenon of the "breaking off short," or notching of the fasciculus of a voluntary muscle in a transverse cleavage of the fibre, is regarded by Dr. Barry as a natural consequence of the interlacing of the larger spirals, which he has described in a former paper; the fracture, in proceeding directly across the fasciculus, taking the direction in which there is least resistance.

The position of the filament in the blood-corpuscle is represented as bearing a striking resemblance to that of the young in the ovum of certain intestinal worms, the filaments of which are reproduced by spontaneous division. The author subjoins the following quere, "Is the blood-corpuscle to be regarded as an ovum?"

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

The contributions to medical science at the last meeting of this Association were, as usual, extremely meagre and of inferior quality. The only communications worthy of notice were the following, which we extract from the "Athenæum":—

INSTRUMENTS USED IN AUSCULTATION.

Professor Williams read a paper "On the Construction and Application of Instruments used in Auscultation." To express the acoustic law, according to which all improvements in the stethoscope must be attempted, he deemed of great importance; and this law he stated to be, that sounds are best conducted by bodies of an elasticity or tension resembling that of the sonorous body; on the other hand, bodies differing in elasticity are bad recipients of each other's vibrations. Thus, sounds produced in air (vocal and breath sounds) are best transmitted by an inclosed column of air; those produced by solids (those of the heart, rhonchi, friction) are better communicated by rigid solids of moderate density. He proceeded to show how these principles were applicable to explain the form and material he has adopted in the stethoscope, and detailed a number of experiments by which he demonstrates the imperfection of the proposed flexible stethoscope, which only transmitted the sounds explored through the inclosed column of air in its central cavity. On the other hand, the assertion of Dr. Cowan, though supported by Professor Forbes, that plugging the cavity of the rigid wooden stethoscope does not materially impair its efficiency, Professor Williams proved, by experiment, to be erroneous; but the impairment is least when the aurile end of the instrument is plugged. In making experiments of this kind, he insisted on the necessity of having some faint sound as a test sound (as the opticians have a test object), one just within the bounds of audibility, as the sound of expiration, or a faint cardiac murmur. The necessity for an *inclosed* column of air was proved by making an opening in the side of the pectoral extremity of a common stethoscope, the efficiency of which was thus destroyed, but was instantly restored by closing the aperture. Following the assertion of acoustic writers, that the pulses of sound pass through air in straight lines, like rays of light, Professor Williams had formerly recommended the enlargement in the pectoral extremity of the instrument to be made in the form of a straight cone, instead of the parabolic hollow used by Laennec; but subsequent experiment proved to him that a trumpet or bell-shaped termination was the best; this enlarges the surface from which the sounds are collected, without proportionally enlarging the cavity, which would give rise to a conchal or tinkling echo. Another advantage may be derived from this form of termination, in its being capable of being reversed; the aurile extremity serving to shut out diffuse sounds, when we wish to examine one spot only. Professor Williams concluded, by making a few remarks on percussion, which he stated to be modified by the force adopted; thus, gentle and flat percussion reaches and is toned by superficial parts only, whilst, if forcible, it reaches and is toned by deep seated parts also. He stated, that the strokes differed, not only in loudness, but also in pitch, or musical tone. Disease, he stated, could frequently be detected by percussion, before auscultation gave any indication.

STATISTICS OF CONSUMPTION.

Mr. Noble read a paper "On the Influence of the Factory System in the Development of Pulmonary Consumption." He compared the prevalence of consumption in the manufacturing town of Manchester, with its amount in other places where there is little or no manufacture. According to the census of 1831, there were 49,932 families resident in Manchester and Salford; the entire registered deaths in 1839 were 9,223, and the cases of consumption 1,454—that is, 1 death from consumption out of every 34 families, and 3 from consumption in every 19 deaths from all causes. In agricultural Essex, with a population of 62,403 families, the deaths from consumption in 1839 were 1,201, and the total number of deaths 6,352; being, in the agricultural district, 4 in every 21, and in the factory district but as 3 in 19. In the district embracing Cambridgeshire, Huntingdonshire, and the southern divisions of Lincolnshire, comprising a population of 67,351 families, the deaths from all causes were 7,306, and those from consumption 1,308, or nearly 1 death in every 5. Thus the general mortality was lower in the agricultural districts, but the proportion of consumptive cases to deaths was greater. In Liverpool, out of 43,026 families, the deaths for 1839 were 9,181, and the deaths from consumption 1,742. Thus in Liverpool there are 2 deaths from consumption out of every 49 families, and in Manchester only 2 out of every 68. In Birmingham the condition was more favorable, being nearly 1 death from consumption out of every 36 families. In London the rate is 2 deaths from consumption out of every 105 families, and the proportion of consumptive cases to deaths from every cause exactly the same as Manchester, or 3 out of 19. With the exception of the metropolis, Manchester has fewer consumptive cases in proportion to the number of deaths from every cause than any of the districts above mentioned; and hence Mr. Noble inferred that factory labor has no direct tendency to produce consumptive disease. Taking the register of deaths for three years in the township of Manchester between the ages of fifteen and forty, the following results were obtained:—174 consumptive deaths were of persons employed in factories, 590 of persons registered in various occupations, and 377 without any stated employment. Of the factory operatives, 45 were spinners, 49 winders, 28 piecers, 15 reelers, 11 carders and frame-tenders each, and 10 stated generally to be employed in factories. The general conclusion from these and similar facts was, that factories have no special influence in producing scrofulous disease, or its peculiar manifestation, consumption.

Dr. Alison, in a few brief remarks, confirmed generally the accuracy of Mr. Noble's views.

VENTILATION.

Mr. Liddell read a paper on ventilation, on a method proposed by Mr. Fleming, of Glasgow. It had been tried in a large building occupied by a number of poor persons, each family having a room. From the unclean and intemperate habits of the inmates, and their number (about 500), the house was very unhealthy, and many deaths from contagious diseases

took place. In the plan adopted, the galleries were traversed by pipes of nine inches diameter, which united in a vertical pipe of large dimensions communicating with a lofty engine-house chimney; and small pipes of one inch diameter, at the top of each room, communicated with the pipes in the gallery. This plan had also been tried in the Glasgow Fever Hospital, in which the beds for fever patients, &c., were fitted up with the tubes for carrying away noxious effluvia. A similar plan for the ventilation of ships and steamers had been introduced by Dr. Reid, by leading tubes from the berths into a stove on deck, or, in steamers, into the chimney. Mr. Liddell stated that the expense for a house of 60,000 cubic feet was only 40 lb. of coal in twenty-four hours.

At the conclusion of the proceedings, £40 were voted to Professor Sharpey and Mr. Erichsen for researches on asphyxia, and £40 to Professor Williams and Mr. James Blake for researches on the action of medicinal agents.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JULY 9, 1842.

The following important conversation took place on Tuesday evening last in the House of Commons:—

"Lord John Russell wished to know from the Right Honorable the Secretary of State for the Home Department, whether it was his intention to bring in a bill, in the present session of Parliament, with reference to the Colleges of Physicians and Surgeons; and if such a bill were introduced, whether it was intended that it should come into operation before the next session of Parliament?

Sir James Graham said it was his intention to move for leave to bring in such a bill, and he was certainly desirous that it should come into operation before the next session of Parliament.

Lord Sandon inquired whether the new bill would confer the power of granting degrees?

Sir James Graham said the bill would not contain such a provision, as no such power was required.

Lord John Russell: If it be not necessary to include this power, where is the necessity for the bill?

Sir James Graham said he would, when he moved for the bill, state the nature of the new charters which it was in contemplation to grant to the Colleges of Physicians and Surgeons.

In answer to a question from Mr. O'Connell, Sir James Graham replied, that the proposed changes would not affect Ireland."

The conversation which we have just reported, though brief, and of apparently trifling import, indicates clearly enough the course about to be pursued on the subject of medical reform. A great part of the mystery which enveloped the proceedings of Sir James Graham has been dissipated by the well-timed interrogatories of Lord John Russell. Instead of medical reform, in its true sense, we are to have a remodelling of the medical corporations; the interests of the great body of the profession are to be made subservient, as heretofore, to the reigning powers, and instead of a comprehensive measure, embracing all classes, and extending to all parts of the empire, our new constitution is to be confined to the colleges, and its influence restricted within the limits of England and Wales.

Such are the first impressions produced by the information extracted from Sir James Graham on Tuesday last. We sincerely trust that our apprehensions may be unfounded. Any partial reform of existing abuses, so far from allaying the present ferment, can only increase the strong discontent which prevails in every corner of the commonwealth of medicine. Hope deferred may make the heart sick, but disappointed hope engenders feelings of a different and far less tractable nature. It is evident that the question of medical reform is rapidly approaching a crisis; but whether for good or for evil, must depend on the conduct of those who have assumed the responsibility of this important measure, without consulting the persons most deeply interested in it.

We would, therefore, earnestly and respectfully entreat the heads of the Colleges of Physicians and Surgeons to pause before it be too late, and not to press forward, with unseemly haste, any measure which has not been discussed and examined by the body of the profession. For their benefit the proposed changes are professedly brought forward, and they are assuredly the best judges of that which they require for the promotion of their individual interests.

The point to which we have just alluded has been so ably illustrated by Sir James Clark, that we are tempted to quote a passage or two from his letter to Sir James Graham.

"The mere reform of the existing medical institutions would have small influence in tranquillising the present agitated state of the profession, because such a partial measure of reform would do little for the great body of practitioners. On the contrary, I am inclined to believe that such a limited reform would produce an injurious effect upon the profession, by giving a temporary stability to institutions which are not, and, as far as I can see, cannot be adapted to represent the profession as a body. Reform of the present medical corporations would even be of little permanent advantage to themselves; for it is quite certain that any reform of these bodies which has not for its aim and end the good of the whole profession, and the advantage of the public, cannot and ought not to endure. I would ask the advocates of such a partial measure, what are the great objects to be aimed at in reforming the present anomalous state of the medical profession in this country? Is it not to improve and equalise the education of medical men throughout the country, in order that the public may be supplied with competent medical advisers? Is it not to raise the character of the general practitioner, and put an end to the discontent which has so long

existed in the profession, on account of the unequal and generally imperfect education of its members, and the vexatious regulations respecting the privileges of men licensed by different bodies; and, finally, is it not to unite the whole profession into one corporate body? Can these objects be attained by reforming institutions, the separate existence of which tends to keep up the very evils complained of, while they exercise little or no beneficial influence on the profession? That the members of these bodies do not see the impolicy as well as injustice of attempting to limit the reform to a miserable extension of their own corporations, excluding the great body of general practitioners from any connection with them, does appear to an unbiassed observer inconceivable. Such a union of the whole profession as is here advocated must come; it is inevitable, because it is the only reform which is consistent with the natural order of things, that is founded on justice, or can place the medical profession, as a body, in the position which it ought to hold among the other liberal professions."

"The Colleges of Physicians and Surgeons have now an opportunity of preserving all that is worthy of preservation of their institutions, and at the same time performing an essential service to the profession. If they allow the present occasion to pass, they may not again be placed in so favorable a position. What they may now grant with a good grace, and which will be considered a boon by the profession, they may feel constrained to yield at no distant period; for unless a liberal and comprehensive measure of medical reform be obtained now, many years will not elapse before the subject will be again agitated, and the whole ground will have to be again gone over; while, during the interval, the discontent and bickerings, which have too long existed in the profession, are not likely to be diminished by the feeling of bitter disappointment consequent upon the failure of the present measure. If the colleges see their own real interest, they will reflect seriously before they oppose the just claims of the profession."

These observations are too forcible and full of truth to be acceptable to the corporations, who have set forth a species of defence in the "Medical Gazette" of last week. The views of our contemporary on most subjects are sound; but in the present instance the desire to make the worse appear the better cause has led that respectable journal into one or two errors, both of fact and of reasoning, which we feel called upon to correct. The Gazette acknowledges the justice of Sir James Clark's principle, "that the general practitioners are the persons most interested in the present changes, and claim the first attention," but excuses the neglect with which they have been treated, on the grounds that the medical associations (their organs) entertain the most various and contradictory opinions upon medical reform; and, moreover, represent too small a section of the practitioners of the country to give weight to their opinions.

On the other hand, says our contemporary, "the councils of the corporations must be considered, in some measure at least, as representatives of the whole profession, and from having hitherto had the direction of affairs, they are more fully acquainted with the existing deficiencies, and better able to propose the means of supplying them, than those whose opportunities of observation are more limited."

This is a quiet and agreeable way of settling a disputed question.

The self-elected and irresponsible Council of the College of Surgeons, and a chosen few from the fellows of the College of Physicians, the representatives of the whole profession! Is our contemporary serious? By whom have they been chosen to represent the *whole* profession? What connection has the College of Physicians with the body of the profession? Does any one to the east of Oxford-street—to say nothing of the rest of London, the seven miles round it, and the whole of England and Wales—regard the College of Physicians in any other light than as a corporation to which resort is had for the enjoyment of certain privileges? How many members of the College are scattered throughout the provinces? How many towns and counties are there in which a single representative of the College is not to be found—has never been heard of? The pretension of the College to represent the profession is a pleasantry, and nothing more. For the Council of the College of Surgeons it is unnecessary to say a single word, because the Council itself has pleaded "guilty," and we do not conceive that the gratuitous assertions of the Gazette can counterbalance the confessions of the criminal, or set aside the unanimous verdict of the public.

Where, then, are we to seek for the representatives of the profession? From whom are we to gather the opinions of the medical practitioners of this country?

From the councils of the medical associations. In the present state of affairs *they* must be considered as the representatives of the profession, because *they* have been chosen by a very large section of the medical practitioners of the United Kingdom to demand in their name the redress of grievances, for relief from which they had in vain looked to the medical corporations.

This is the plain, unvarnished state of the case. The medical associations now comprise fully one-fourth of the medical practitioners of the United Kingdom; yet their united voice is, forsooth, to be drowned by the whisper of some thirty or forty monopolists, who have never received any mission—whom we defy to produce any credential from the most insignificant fraction of the profession.

But it is said, "the views and proposals of the associations are so various and contradictory that they neutralise one another. Scarce any two agree, except in the one point—that reform is necessary."

This statement is completely opposed to the fact, and if it come from the corporations, indicates to what

lengths they are prepared to sacrifice truth for the attainment of their own ends.

The medical associations are agreed upon the main principles of medical reform, and only differ on certain details of minor import. They are agreed on the necessity of an uniform primary qualification for all persons hereafter entering the profession; they are unanimous in demanding an equality of privileges throughout the United Kingdom for persons thus equally educated; they require the introduction of the representative system, to a certain extent, in the constitution of the governing bodies; and they ask, as a boon, the institution of some supervising body, which, as Sir James Clark suggests, "might form a board of reference to the Government in all matters relative to the public health, as well as a board for regulating medical education." The medical associations have repeatedly proclaimed their principles and invited discussion on them; they are, therefore, well known. But are the corporations *united* in *their* ideas of medical reform? Are they unanimous upon any one point, save that of retaining power as long as they can? Are the apothecaries content with the extinguisher which their friends of the College have placed on them? Does no cry of distress or complaint issue from Rhubarb Hall? Where are the universities? Are these ancient seats of learning satisfied at the prospect of being swallowed up by the College of Physicians? Or has Edinburgh no misgivings at the idea that all the physicians of England are to be placed under the dominion of the authorities at Pall Mall?

Were these questions sincerely answered, we fancy that confusion and strife would be found to prevail in the corporate camp to a fearful degree; for if the adage, "*Quot homines, tot sententiæ*" be applicable, the corporations are as 19 and the associations as 6.

We do not pretend to point out what line of conduct should be adopted by the friends of medical reform in the present crisis. Measures will probably be resolved on without delay by those in whose experience and judgment we place full confidence; and, when adopted, they shall receive our cordial support. Time, however, presses. On the new charters which Sir James Graham intends to confer on the Colleges of Physicians and Surgeons will be founded the Government bill of medical reform. It remains to be seen whether the profession will be content with a simple remodelling of these institutions, instead of the complete and definitive measure to which they have looked forward with so much anxiety.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The Bath and Bristol District Branch of this Association held its first sectional meeting on Thursday, in the lecture-room of the Bath Royal Literary and Scientific Institution. Among the gentlemen present we observed—

Drs. Barlow, Daniell, James Watson, and Cardew, of Bath; M. Fox, Bompass, Davis, and Lloyd, of Bristol; C. and F. Fox, of Brislington; and Cowan, of Reading. Messrs. Godfrey, Soden, Stone, King, Norman, S. Barrett, George, Bartrum, J. Soden, and Ormond, of Bath; Flower and Leach, of Chilcompton; Crang, of Timsbury; Vicary, of Warminster; Edwards, of Batheaston; Washbourn, of Corsham; Staples, James, Morgan, Estlin, Hetling, and Godfrey, of Bristol; Thewster, of Thornbury; Lloyd, Caddell, and Salmon.

Dr. Barlow having moved that the president take the chair, R. Godfrey, Esq., said he must return thanks for the very gratifying support he had received while he held office; and he could not retire without expressing the satisfaction which he felt at the union which had been so happily formed between the Bath and Bristol branches. (Cheers.)

Dr. Daniell, the president elect, then took the chair, and addressed the members in a very eloquent discourse, which, however, was chiefly occupied with matters of local interest. On the subject of medical education, Dr. Daniell said "The question naturally occurs (and to us it is a question of the greatest interest), has medical education kept pace with the general education and with the professional training of other classes? I answer fearlessly, It has. For, to whom should we look to decide this question? Not to the gifted few who spring to eminence in every age and from every soil, through their own native energy, with any or with no cultivation—not to them should we look, but rather to the general body of the profession; for the business of education is with ordinary men, and it is in the comparative state of the mass of mankind that its effects are rendered the most apparent. Now, has any class of men advanced more rapidly within the last half century, than the general practitioners of this country? Assuredly they are not behind the age. So great has been their progress in various branches of knowledge, that this circumstance in part accounts for the desire which we sometimes hear expressed that all branches of the profession should be united, and that something like equality should be established between them." (Hear, hear.) Such wishes, however, were, according to Dr. Daniell's views, not likely to be realised; they were unjust to the public and to the profession, and quite impossible. Having touched on several other topics of minor import, the president concluded his address by an appeal to the meeting on the necessity of all members of the profession adopting the sentiments and the manners of gentlemen.

Dr. Barlow, the secretary, was called on to read the report. He said the transactions of the council had generally been so limited, that their reports had always been very brief; the principal circumstance alluded to, was the union of the Bristol and Bath branches, which took place in 1841; the united branch

comprises 120 members, and there was every prospect that the number of associates would be speedily increased. The reporter suggested, that in addition to the anniversary meetings, at which medical discussion can scarcely be expected to take place, quarterly evening meetings, held solely for the purpose of medical communication, might not be incompatible with the professional engagements or personal convenience of the members.

"The council had received from the secretaries of the Association the usual sketch of their forthcoming report. It presents a most favorable account of the institution, showing that its course of successful exertion suffers no abatement, and that its prosperity is still progressive. (Cheers.)

Such of the members as purpose attending the general meeting at Exeter (and the council trust that several of the Bath and Bristol district members will be so disposed) will there have full opportunity for joining in the discussions to which the several topics contained in the report may give rise."

After the transaction of some routine business, and the passing a vote of thanks to Drs. Green and Streeten "for the liberal arrangements by which the 'Provincial Medical Journal' was supplied to the members of the Association," Mr. Estlin read a communication on strabismus, giving the result of his experience in 100 cases in which he had operated. Of these, 39 were males, and 61 females; and their ages were as follows:—From five years and a half to ten, 13; ten to fifteen, 17; fifteen to twenty, 23; twenty to thirty, 26; thirty to forty, 9; forty to fifty, 5; fifty to sixty, 5; sixty-two, 1. In these cases, 39 squinted in the left eye; 22 in the right; and the rest in both eyes. The results of these operations had been—internal squint perfectly cured, 41; satisfactory, 21; very satisfactory, 9; improved, but requiring another operation, 7; squint returned, 4; improved, but unfavorable for a second operation, 5. Of external squint, 5 had been perfectly cured, 3 improved, and 1 not at all improved. On the whole number of cases, then, the result was—perfectly cured, 65; satisfactory, 9; improved, but requiring another operation, 7; not improved, requiring operations on both eyes, 4; unfit for operation, 5; no improvement, 2; slight improvement, 3. The operations for external strabismus had not been so successful as those for internal; but then the proportion of cases was fortunately very small. The paper concluded by some well-timed remarks on the moral influence achieved by this triumph of surgery.

Mr. Soden then submitted a paper, calling the attention of the members to the relief afforded by benzoic acid in cases of inflammation of the bladder, in which he narrated some very successful cases of its application in his own practice.

The President said he was sure the members would be unanimous in awarding their thanks to Mr. Soden for his valuable paper, as well as interested in learning the relief which had been afforded in a very painful disease.

Dr. James Watson then brought under the notice of the members two patients whom he had treated for chronic pleurisy with effusion. The one was a little girl, nine years of age. He saw her for the first time on the 3rd of March, 1841, when he found her laboring under all the symptoms of confirmed phthisis; but soon discovered, by percussion and auscultation, that the disease was not in the lungs. Finding there was still some degree of strength remaining, he tried the effect of treatment, and used iodine and blisters, and also mercury, till the mouth became sore. No impression being made, Mr. F. Field, at his request, performed the operation of tapping, according to the method directed by the late Dr. Thomas Davies. After drawing off about twelve ounces of purulent matter, a portion of gum-elastic catheter was passed into the cavity of the chest, through the canula, and fastened to the side, the plug of which was removed every second day, and in this manner several quarts of matter were drawn off. During the period of recovery the patient was attacked with hooping cough, and suffered from it very severely. She had, however, gradually recovered. The tube was removed in about four or five weeks. She was now perfectly well, though, as the meeting would observe, there was a little falling in of the side. There was no deformity, and as the lung expanded, the curvature of the spine passed away. The other patient was then introduced, and was a little girl, eight years of age. The first time Dr. W. saw her was on the 5th of February, 1841. She had then been ill nine weeks; and was apparently in a dying state, being bathed in perspiration, and having a very small and feeble pulse. Having caused her to be stripped, he observed that she was labouring under the same character of disease as the former patient, and determined on having the same operation performed. Mr. Cowcher, who had seen her for the first time a day or two before, performed the operation, and on this occasion drew off sixteen ounces of purulent matter. She immediately expressed her thanks for the relief thus afforded; the tube was introduced as in the former case; and the plug being removed every second or third day, full five quarts of matter had been discharged. The child regained her health in a short time; and since the catheter had been removed, she had been in perfect health.

In the evening the members of the Association dined together at York house; the president (Dr. Daniell) being supported on either side by the Mayors of Bristol and Bath.

The following are the officers appointed for the ensuing year:—President: Dr. Henry H. Fox.—Secretary: Mr. George H. Hetling.—Secretary for Bath: Dr. William J. Morgan.—*Abridged from the Bath Journal.*

BENZOIC AND HIPPURIC ACIDS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—In the present agitated state of the scientific world as to the conversion of benzoic acid into hippuric acid, I take leave to refer your readers to a recent paper of mine upon the subject, in the twelfth number of the "Pharmaceutical Transactions."

Your obedient servant,

Alexander Ure.

13, Charlotte-street, Bedford-square,
July 5, 1842.

*** We regret that we cannot calm the agitation of the scientific world until next week, when we shall publish the substance of Mr. Ure's paper.—Eds.

RETROSPECT OF THE MEDICAL SCIENCES.

RUPTURE OF THE UTERUS, CAUSED BY THE IMPROPER USE OF THE SECALE CORNUTUM.

M. Delmas has published, in the "Journal of Practical Medicine of Montpellier," two cases of ruptured uterus, caused by the unadvised administration of the secale cornutum. One of these will serve as an example or beacon against hurrying or interfering with labor when all is doing well. A young woman, twenty years of age, primiparous, having always enjoyed good health, and having gone her full time, was taken in labor under the most favorable circumstances. After the lapse of eight hours the os uteri was nearly quite dilated, the bag of waters had broken, everything was proceeding as it should, when her attendant decided to give a scruple of powdered secale to hasten the egress of the child. The uterine contractions were increased, but the head receded into the pelvic cavity, and was replaced by a soft, unequal tumor. M. Delmas having been sent for, found the poor woman in a state of extreme anxiety, complaining constantly of general malaise, with sickness and faintings; the pulse was small and contracted, the abdomen painful to the touch, and containing two distinct tumors, one to the right, the other to the left; the smaller one to the left was the nearer to the surface, and the more readily circumscribed; the larger one to the right was less hard, deeper seated, and presented a less regular surface. A small quantity of blood drained away from the vagina, and on examination it was found that, although the os uteri was dilated, the right shoulder presented only at the brim of the pelvis. M. Delmas at once conjectured that rupture of the uterus had taken place, and having roused the vital powers by a cordial, brought down the feet, and delivered his patient of a dead child. While thus proceeding, M. Delmas, having one hand on the tumor on the left side, felt it re-enter the uterine cavity. The poor woman died a few days afterwards.

NASAL POLYPUS.

Charlotte Hebert, thirty years of age, was admitted in April last into la Pitié, under the care of M. Lenoir, with symptoms of nasal polypus of five years' standing. In the previous August, violent spontaneous hæmorrhage ensued, which returned six weeks afterwards, and again in the following November, so violently as to require plugging. This led to attempts at extracting the polypus, which were always followed by hæmorrhage and a rapid increase of the polypous growth. On entering the hospital, she presented the following appearances:—The right nasal fossa was completely filled by a tumor projecting at its anterior opening, and pushing the septum nasi so much to the left, as to close the other fossa entirely. The right nasal bone was separated from the nasal process of the superior maxillary, and lay loose in the midst of the soft parts. On examination of the fauces by the finger, the polypus could be readily felt there, and by pressure could be made to project externally. The nose was drawn very much to the right. The removal of the polypus having been decided on, it was effected by separating by incision the right ala of the nose from the septum, introducing the finger from above downwards into the nasal fossa, when its ablation was accomplished with the greatest ease, leaving a very large cavity formed by the enormously distended nasal fossa, and by the maxillary sinus, the internal paries of which was destroyed. The pedicle of the polypus sprung from the sinus; its base was formed by three or four mucoso-fibrous polypi, but it was almost entirely composed of a friable mass, of a blackish-red colour, and like clots of blood partially organised. Some parts of this tissue were of a blackish-grey colour, and had a bad aspect. The mucous membrane was carefully examined with the finger, and seemed to be healthy, except that in one part there were some rough points, which were destroyed by the nail. The lips of the wound were united by five points of interrupted suture, and the nose covered with compresses wetted with cold water. The patient did well. By the 12th of May cicatrisation had taken place in every point, the nose had resumed its proper place in the median line of the face, the swelling of the cheek had disappeared, the right nasal bone was again in contact with the nasal process of the superior maxillary, and respiration was carried on easily through the right nostril, the left remaining closed.—*Bullétin de Thérapeutique.*

THE VEGETABLE ORIGIN OF TINEA FAVOSA.

Recent researches have demonstrated that certain diseases owe their peculiar character to the growth of fungi or cryptogamic plants in the animal textures. Schonlein, of Berlin, was the first to detect mycodermata in tinea favosa, in which discovery he was confirmed by Fuchs and Langenbeck, of Göttingen, and Textor. Gruby, of Vienna, has given the most perfect description of these vegetations.

In this disease the first morbid change is increased vascularity of the skin, accompanied with a desquammation of the cuticle; in a period varying from six to twelve days, small spots of a bright yellow colour, like sulphur, may be detected. These gradually increase in size, but even at the earliest period may be observed with a lens to have a central depression, through which a hair may be seen to pass. The crust or capsule may enlarge to the size of a shilling, and, if isolated, still retain its rounded form; usually, however, its edges come in contact with other capsules, and then it loses its rounded shape, and assumes the hexagonal or honeycombed appearance described by authors. On the first appearance of the capsule, its edges are somewhat depressed below the surface of the cuticle; but, as it increases in size, they become more and more elevated, and at length are very prominent. At first, also, the whole capsule appears of an homogeneous bright yellow; but, when further developed, its centre assumes a white color. This arises from the aggregation of the sporules of the plants, which are more abundant in this situation. As the development proceeds, this central, yellow, whitish mass assumes a mealy, powdery consistence, encroaches upon the edges of the capsule, which gradually disappear, whilst its upper concave form becomes convex, as Gruby pointed out. In general, an inflammatory ring is seen round the crust, which, as the capsule becomes elevated above the skin, enlarges, and assumes a

deeper color, indicative of the increased local irritation. At length the whole cracks, or splits up; all regular form is lost; a dense, thick crust covers the scalp; an odor like the urine of mice or cats is evolved; and in chronic cases, vermin deposit their eggs in the interstices, and crawl in large numbers over the surface. Pustules may precede the appearance of the yellow spots or capsules, but their presence is not essential to the disease. Gruby says they are never present, but that is an error. At the commencement there is but little local irritation, but it soon becomes intolerable. The constitutional symptoms are those of scrofula.

The peculiar favus crust is composed of a capsule of epidermic scales, lined by a finely granular mass, from which millions of mycodermatous plants spring up and fructify; the presence of these vegetations constitutes the pathognomonic character of the disease. In order to examine the development of these vegetations microscopically, it is necessary to make a thin section of the capsule completely through, embracing the outer layer of epidermis, amorphous mass, and light friable matter found in the centre. It will be found, on pressing this slightly between glasses, and examining it with a magnifying power of 300 diameters, that the cylindrical tubes spring from the sides of the capsule, proceed inwards, give off branches dichotomously, which in turn terminate in round or oval globules. These tubes are from the 1-400th to the 1-600th part of a millimetre in thickness, jointed at regular intervals, and often contain molecules varying from 1-10,000th to 1-1000th of a millimetre in diameter. The longitudinal diameter of the sporules is generally from 1-300th to 1-100th, and the transverse from 1-300th to 1-150th of a millimetre in diameter (Gruby). The sporules agglomerated in masses are always more abundant and highly developed in the centre of the crust. The cylindrical tubes are more readily found near the external layer. Swellings have been occasionally seen on the sides of the jointed tubes, which are apparently commencing ramifications.

The seat of favus has been fixed by some writers in the piliferous bulbs or follicles, by others in the sebaceous glands, and by a third party in the reticular tissue of the skin. According to Gruby, the plants grow in the cells of the epidermis, the true skin is compressed, not destroyed, and the bulbs and roots of the hair and sebaceous follicles are only secondarily affected. M. Erichsen considers the matter of favus to be a modification of tubercle—a disease, in fact, consisting in the deposition of that heterologous formation called tubercle. This opinion to a certain extent is held by Dr. Hughes Bennett, who considers the tubercular matter to form only the soil whence the mycodermatous vegetations spring. He sums up by stating that the pathology of tinea favosa is best understood by considering it a form of scrofula, understanding by that term a peculiar state of the constitution accompanying tubercular deposition in one or other of the animal textures; that in this particular disease the tubercular effusion takes place among the cells of the epidermis, and there constitutes a soil for the germination of mycodermatous plants, the presence of which is pathognomonic of the disease.

The disease usually attacks the hairy scalp, but it may occur on the forehead, temples, cheeks, nose, chin, ears, shoulders, arms, abdomen, lumbar region, sacrum, knees, and legs. It is most common in children between the ages of three and twelve years. Alibert considered the disease hereditary. It has usually been regarded as contagious, but certain experiments of Dr. Bennett appear to throw a doubt upon this subject. Gruby inoculated animals and plants with it, but succeeded only once in producing it. Dr. Bennett inoculated the human subject, and his own person repeatedly, but with no better success, or rather less, than Gruby. He induced inflammation, suppuration, and ulceration on his own scalp, but did not produce any disease resembling porrigo.

The chief indications of treatment are, first, to remove the scrofulous disposition, and, secondly, to employ such topical applications as tend to prevent the development of vegetable life. Dr. Bennett thinks he possesses a remedy capable of fulfilling both indications in cod liver oil, the former by its internal administration, the latter by its external application. He gives a case in support of his views.—*Dr. Hughes Bennett, London and Edinburgh Monthly Med. Journ.*

FERRUGINOUS HYDROGEN.

When hydrogen is disengaged by the action of sulphuric or hydrochloric acid on iron, the gas has an alliaceous odor, and burns with a flame yellow at the circumference and green in the centre. In burning it gives rusty-coloured, sometimes reddish spots, often possessing an iridescent metallic reflection like iron. These are not owing, as some chemists suppose, to drops of a chalybeate salt having been mechanically carried with the gaseous current, for they are produced even when the gas has been washed in a solution of potass, has passed through a tube containing asbestos, and has been otherwise ascertained not to contain any sulphate or chloruret of iron.

M. Dupasquier considers these spots are caused by the combustion of ferruginous or phosphuretted hydrogen, which is mixed with the pure hydrogen, and on which the potass has not any action. The ferruginous hydrogen is decomposed by chlorine, iodine, bromine, and metallic solutions, such as the solutions of the nitrate of silver, the deuto-chloride of gold, and the deuto-chloride of mercury.

The formation of ferruginous hydrogen, when either sulphuric or hydrochloric acid react on iron in Marsh's apparatus, forbids its use in testing in cases of suspected poisoning by arsenic, more especially as the spots formed from that metal, when dissolved by nitric acid, have a reaction with the ammoniaco-nitrate of silver that might deceive inexperienced operators, and be mistaken for genuine arsenical spots dissolved by that acid. M. Dupasquier adds that the use of iron prevents the formation of arseniuretted or antimoniated hydrogen.—*Journal de Chimie Médicale.*

EFFECT OF AGE ON THE MORTALITY OF PNEUMONIA.

From the clinical report of M. Chomel's practice at the Hôtel-Dieu during the last six months of 1841-42, we learn that 28 cases of pneumonia were admitted, 3 of which, however, are not taken into consideration of the statistical arrangements, 1 being doubtful, and the other 2 merely complications; 6 out of the remaining 25 died, 1 eighteen hours after he was admitted, and 2 others dying of inflammation consecutive on serious disease of the organ previously existing. The mortality is, therefore, as 1 to 6½.

Pneumonia affecting the apex of the lung has been less dangerous than that of the base—a fact in opposition to general opinion; but it must be acknowledged that the inflammations of the base were connected with unfavorable circumstances with respect to age, constitution, &c., so that no conclusion should be drawn from that fact. Pneumonia attacking the central part of the lung was generally very dangerous. From the year 1832, when the publication of these reports was commenced, up to the present time, the mortality in pneumonia, from the age of 15 to 20, has been next to nothing; out of 59 cases occurring between those two ages, there have been only 2 deaths. From 20 to 40, the mortality is as 1 in 6; from 40 to 60, it is greatly increased, being as 1 in 3; after 60, death is as likely to occur as recovery; and at 75 or 80, recovery becomes an exception.—*Gazette des Hopitaux.*

GENERATION OF SULPHURETTED HYDROGEN IN MARSH'S APPARATUS.

Messrs. Fordos and Gélis stated, in August last, to the Academy of Sciences, that although pure zinc and sulphuric acid generally yield pure hydrogen in Marsh's apparatus, yet they had sometimes detected the presence of a larger or smaller quantity of sulphuretted hydrogen. In consequence of this discovery —a most important one in a medico-legal point of view—they commenced a series of experiments, in order to ascertain the circumstances under which it is formed, and the influence exerted by it, when researches are instituted for arsenic in cases of suspected poisoning.

If pieces of laminated zinc, free from sulphurets, and pure sulphuric acid, previously diluted with three times its volume of water, are placed in a flask with two tubes, one funnel-shaped, and the other bent, its extremity passing into a solution of acetate of lead, the hydrogen gas which is disengaged passes through without coloring it; but if concentrated sulphuric acid be added by the funnel-shaped tube, the lead solution is instantly seen to change to a black color, and the temperature to rise in the tubulated flask. On seeking the cause of this phenomenon, it was found that sulphuretted hydrogen is formed only at the moment of contact of the concentrated sulphuric acid and the zinc, when the temperature is higher than 175° Fahrenheit—that is to say, in that condition that it can produce sulphurous acid.

It is, in fact, to the intermediate formation of this gaseous body that the production of sulphuretted hydrogen is to be attributed; for if sulphurous acid is poured into Marsh's apparatus, when pure hydrogen is disengaging, sulphuretted hydrogen is instantly formed, and may be easily recognised by its odor and action on solution of lead. When there is very little sulphurous acid, the sulphuretted hydrogen is drawn away by the current of hydrogen gas; but when there is a considerable quantity, the sulphuretted hydrogen re-acts on the excess of sulphurous acid, and water and sulphur which is precipitated is the result of their mutual decomposition. When the apparatus does not contain any arsenic, and sulphuretted hydrogen is disengaged and inflamed, yellow spots, consisting entirely of sulphur, may be obtained, but with difficulty, on account of their great volatility. When sulphuretted hydrogen is produced in the midst of an arsenical solution, there will be fewer arsenical spots, and arseniuretted hydrogen will be generated at the same time as the sulphuretted hydrogen, the two gases passing off together, and forming a jet, which, when inflamed, yield spots, varying in color from the clear yellow to a dull red, according to the quantity of free or combined arsenic contained in them. The brilliant yellow spots appear to be almost entirely pure orpiment. Ammonia dissolves them immediately, and they reappear on evaporation. They are also soluble in caustic potass; nitric acid, even when heated, dissolves them with difficulty. Aqua regia causes them to disappear directly, and the solution evaporated to dryness, and heated with neutral nitrate of silver, yields the brick-red color of the arseniate of silver.

These spots have been met with by other chemists, but the color has been almost always attributed to the presence of organic matter, modifying the properties of the arsenic; by others they have been considered to be sulphurous spots.

The presence of sulphurous acid is owing to the process of carbonisation, according to Messrs. Fordos and Gélis, and, in consequence, they reject it altogether, preferring the reduction of the animal matter by incineration, by which process they avoid the difficulty altogether. The process they adopt is as follows:—The animal matter is dissolved in pure caustic potass, with the addition of heat. The muscles, liver, lungs, and animal matters of analogous consistence, require from 10 to 15 per cent. of potass; blood requires less, and, as a general rule, the more solid the animal mass, the more potass is requisite. When the solution is completed, the alkali, when cold, is saturated with diluted nitric acid, this addition causing the separation of a large quantity of solid matter. This liquid is filtered, the arsenic passing through in the solution, which is then evaporated at a gentle heat, and a yellowish white residuum is obtained, which is easily detached from the capsule, and incinerated, a little being thrown at a time into a rather large Hessian crucible, moderately heated. The incineration takes place quietly, and without deflagration. All that remains is to boil the saline residuum with sulphuric acid, to remove all traces of nitric acid. When a large quantity of caustic potass is used, it were better to saturate the alkali with aqua regia. There will be less nitrate of potass formed, and the chloruret of potassium will favour the incineration by preventing deflagration.

The formation of pseudo-arsenical spots is due, according to Messrs. Fordos and Gélis, to the carbon, the phosphate and sulphate of ammonia having very little influence. They can rarely be mistaken for real arsenical spots, whether they are caused by badly-conducted combustion, or are artificially produced, inasmuch as they are not volatile, are not soluble in any cold acid, not even in aqua regia, and neither potass nor ammonia can dissolve them.—*Journal de Chimie Médicale.*

NITROGEN IN ORGANIC MATTERS.

A new process, as simple as it is certain in its execution, has been proposed by Messrs. Varrentrapp and Will, to determine the quantity of nitrogen present in organic matters. It is founded on the property that azotic organic matters possess of dissolving

in an excess of hydrate of potass, and of disengaging the azote they contain in the form of ammonia, whilst the non-azotic organic bodies give out only pure hydrogen, resulting from the decomposition of the water of the hydrate of potass. The gas produced is passed through a tube, differing little from the tube usually employed in organic analyses, and which contains hydrochloric acid. The combustion of the organic matter having terminated, a solution of the bichloruret of platina is added to the hydrochloric acid, over which the gases of the combustion have been passed, and they are evaporated to dryness in a porcelain capsule. The ammoniaco-hydrochlorate of platina which is formed remains mixed with an excess of the chloruret of platina, which latter is removed by dissolving it in a mixture of two volumes of concentrated alcohol and one of æther. The last compound being well dried at 212° Fahrenheit, is carefully weighed, and the weight of the azote is deduced therefrom. The decision is corroborated by decomposing the ammoniaco-hydrochlorate of platina by fire, and weighing the platina which remains. The quantity of nitrogen deducted from the weight of the metal ought not to differ sensibly from the first. 2,788 parts of the ammoniaco-hydrochlorate of platina represent 177 parts of pure nitrogen. — *Annalen der Chemie und Pharmacie.*

CORPORA LUTEA.

Dr. Montgomery, after the most extensive experiments and elaborate investigations, states that conception never happens without the production of a corpus luteum, and that the corpus luteum is never found in virgin animals, but is the effect of impregnation. This opinion Mr. Renaud seeks to controvert. He admits that impregnation never does occur without our being able to detect one of these bodies, but he is opposed to the concluding part of Dr. Montgomery's statement, that the corpus luteum is never found in virgin animals. In support of his own opinion, he narrates the appearances after death in a young sheep, which he judges to have been a virgin from internal evidence. A true corpus luteum was found in the left ovary, the right containing a spurious one. The uterus was remarkably small, and on being opened, proved to be destitute of any traces of an embryo, nor was its cavity lined with the ropy mucus, but simply moistened, as is the case with all visceral cavities lined with mucous membrane. The cavity of the uterus was completely covered with a deep black lining, except here and there on the summits of a number of round or oval elevations, which are the maternal cotyledons, into which the fœtal tufts penetrate during pregnancy. The black coating is an epithelial structure, consisting of two distinct varieties of cells arranged in a peculiar manner. The dark matter is entirely made up of pigmentary globules, which together form a kind of net-work, in the interspaces of which the simple nucleated cells of Schwann are seen in great numbers; Mr. Renaud considers the precise appearance of this epithelium of consequence, as much of the correct diagnosis depends on it. It exists in the fully developed unimpregnated uterus of the ewe, although it is not found in earlier life, but he is not aware whether it appears subsequent to pregnancy.

Two objections he thinks may be alleged against his case, the first that an early ovum might have been contained in the uterus, and overlooked or lost from its small size; the other is, that abortion might have taken place. To the first, Mr. Renaud alleges the care taken in the examination, the size of the uterus, and the presence of the epithelial lining—besides which, the size and perfect character of the corpus luteum would require a fœtus a month old. The second objection he combats by the state of the uterus.

He adds that the following appearances ought to be clearly discernible previous to any professional evidence being given in a case, whether it be moral, forensic, or physiological:—First, a distinct external envelope, in contact, and in union with the stroma of the ovary, but capable of being dissected away from it entire. Secondly, a solid substance, either fleshy-looking, red, pinkish, or yellow-colored, which should be divided into a greater or less number of segments or lobuli. The deeply fissured appearance of these lobuli has been insisted upon, but as in a great many instances it is absent, its presence can afford no positive criterion. Thirdly, an inner membrane, or the proper ovisac thickened. Fourthly, a central deposition of granular or other matter, or the remains of it. Fifthly, the microscopic appearance presented will form a very good auxiliary. The fact of one of the radii reaching as far as the surface of the ovary, is an appearance useful as an auxiliary diagnostic indication, but it is equally present in the false as in the true bodies.—*London and Edinburgh Monthly Medical Journal.*

HOUSE OF LORDS.

July 1.

The Duke of Leinster presented a petition from the medical attendants of the Kildare Infirmary, praying that the medical charities of Ireland might not be placed under the superintendence of the poor-law commissioners. The noble duke said, that he did not concur in the prayer of the petition. He was a subscriber to this and other charities, and he should wish that they were all placed under the care of the poor-law commissioners.

The Earl of Glengall presented similar petitions from deputy-lieutenants, magistrates, clergy, &c., being subscribers to medical charities in Cahir, Roscrea, Ballina, Waterford, and other places. The petitioners stated that they did not object to have those charities placed under proper superintendence, but they strongly objected to having them placed under the poor-law commissioners.

The Earl of Mountcashel presented a petition signed by seventy-nine of the most distinguished medical men in Ireland, praying that the medical charities in that country might not be placed under the control of the poor-law commissioners. This feeling he had reason to believe was general amongst medical practitioners in Ireland, the very great majority of whom, as of the community at large, had no confidence in the poor-law commissioners; and he (Lord M.) believed that this want of confidence was perfectly justified, for less good for the money expended was never performed by any public body in the United Kingdom; if their efforts at interference should be attended with as ill success as had followed their doings in the poor-law unions, they would be far, indeed, from doing any good to those charities.

EAST YORK BRANCH OF THE PROVINCIAL ASSOCIATION.

The second annual meeting of this branch took place at the Dispensary, Hull, on the 30th of June. R. P. Sleight, Esq., one of the vice-presidents, in the chair.

The report of the out-going committee gave a very encouraging account of the state and prospects of the branch, the members of which are on the increase, and actuated by the best feelings of unanimity and good fellowship.

A series of evening meetings, at the houses of the members, has proved very gratifying and instructive; they have been held monthly, the topics of professional discussion being introduced by the exhibition of pathological specimens of recent interesting cases. The committee of the branch had also been induced, by many and urgent complaints, to lay informations of illegal practice before the Apothecaries' Company; two of the most flagrant cases are now under investigation. The report gives a sketch of political proceedings, as regard the profession, during the last year, particularly discussing the poor-law commissioners' new medical order, and concludes by urging on the members continued energy and perseverance in following up the important objects we have in view.

A draft of the report of the central council of the Provincial Association, to be read at Exeter, was submitted to the meeting, and approved.

The following officers were then elected for the ensuing year:—

President: W. Lunn, Esq.—Vice-presidents: R. P. Sleight, Esq., F. B. Anderson, Esq.—Secretary and Treasurer: Henry Cooper, Esq.—Committee: Dr. W. J. Lunn, Mr. Hardey, Mr. West, Mr. Fullam, Mr. Sleight, jun.

A handsome dinner was provided at the Kingston Hotel, which closed the proceedings of the meeting in a highly agreeable manner.

UNIVERSITY OF EDINBURGH.

The chair of surgery in this university and the chair of pathology are now vacant; the one in consequence of the death of Sir Charles Bell, the other by the resignation of Dr. John Thomson. The election to the chair of pathology will take place on the 9th of August. Amongst the candidates are mentioned Dr. Cragie, Dr. Henderson, Dr. John Davy, Dr. Handyside, and Dr. J. H. Bennett. It is also reported that Dr. Home has at length tendered his resignation, and will be succeeded by Dr. Allison.

PROMOTIONS AND APPOINTMENTS.

NAVAL.

Surgeon—Miller Hamilton to the Salamander.
Assistant-surgeon—James Mitchell to the Sydenham.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, July 1, 1842.

Edward Lawford, William Garbutt Taylor, Edward Lloyd, Matthew Robert Scraggs, Henry Cline Fixott, George Paul Atkinson, Peter Magenis, John George Sime, John Burford Carlile.

APOTHECARIES' HALL.

Licentiates admitted Thursday, July 1, 1842.

W. C. Moat, 14, Thistle-grove, Little Chelsea; G. J. Gates, Peterborough, Northamptonshire; C. White, Southwark; E. S. White; C. Rose, Swaffham, Norfolk.

BOOKS RECEIVED.

The Spas of Homberg, considered with reference to their Efficacy in the Treatment of Chronic Disease. By Sir Alexander Downie, M.D. London: Churchill, 1842.

The Cyclopædia of Practical Surgery. Part XI. London: Sherwood and Co., July, 1842.

Memoir of the late James Hope, M.D., by Mrs. Hope. Edited by Klein Grant, M.D. London: Hatchard and Son, 1842. 8vo. pp. 358.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

A Yorkshire Member. — We have procured the "Standard" of the 29th of June, but do not think the article on the Irish Medical Charities' Bill worth transcribing.

A Newcastle-on-Tyne Practitioner. — It is hardly worth while to quarrel with the remnant of those who were in practice previously to 1815. Our correspondent's views are just, but it is not always necessary to proclaim the truth.

Southern Branch.—Our report of the anniversary meeting of this branch reached us too late for insertion this week, in consequence of being addressed to the publisher and not to the editor.

The letter of Mr. Wilson shall appear next week.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
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CASE
OF
LARDACEOUS CANCER OF THE CRANIUM.

By Alfred Baker, Esq.

(Read before the Pathological Society of Birmingham.)

Joseph Rollason, aged thirty-one, a glasscutter, residing at Nineveh, whose habits have for some years been rather intemperate, states that, about three years ago, being intoxicated, he fell, and cut the forehead on the left side. This wound soon healed, and he never experienced any ill effects from it. Some nine months back he went to St. Helen's, Lancashire, where he resided in a damp house during an inclement season. In two months after he arrived there he was attacked with violent pain in the head, occasional giddiness, and dimness of sight. He also felt dull and heavy pain in the left arm, with numbness and loss of power in the middle finger, and in a few days afterwards pains in the lower extremities, especially in the joints. He took medicine with slight relief, but in another week the pain in the head became more severe, and was accompanied with a small and soft swelling over the part formerly cut. As he grew worse, he returned home about six weeks after the attack commenced, at which period the pain over the head was diminished, whilst that in the legs continued. In a fortnight after his return he complained of pain within the head, and stated that his previous pains appeared to be in the scalp and on the surface; he had also pain and stiffness in the articulations of the lower jaw, and was only able to open his mouth to a small extent; when asked to show his tongue, he could protrude the tip only, and he seemed to be incapable of introducing food into his mouth, from the closure of the jaws. In the course of a few days, numbness and tingling down the left side of the face and left arm came on, and the sight, especially with the left eye, became worse. The swelling referred to, situated a little above the left frontal eminence, began to enlarge without pain, and acquired considerable hardness.

He remained much in the same state for about four months, having occasional remissions and exacerbations of his symptoms, when suddenly the pain in the head was aggravated, and the tumor, which had been slowly enlarging, became tender to the touch. The tingling sensations were worse, and affected the right side of the face more severely than the left, where they were first felt. He had also a puriform discharge from the nostrils, occasionally mixed with blood, whilst all his other symptoms had attained greater severity.

I saw him on the 10th April, 1842, and found him in the following state:—There was a large ovoid tumor on the left side of the frontal bone, running backwards from and a little to the left of the tuber frontale, equal in size to two-thirds of a duck-egg cut lengthwise. It was hard, and superficially lobular, and appeared to be intimately connected with, if not arising from, the bone. The integument covering it is not discolored; it is free from tenderness and pain. Another smaller swelling, which is soft, though still firm, has been to-day discovered on the back of the right side of the skull, near the lambdoidal suture. The patient's face is inexpressive; the left eye is more prominent than the right, and the superciliary fossa is obliterated; no orbital tumor detectible; both eyes somewhat congested; the pupils are rather contracted and insensible to light, but he is quite unable to discover even a lighted candle placed before him. The two sides of the face are not quite symmetrical, the left cheek being slightly drawn. He can, however, retain air in his mouth, by forcibly closing his lips and blowing. He states that his powers of smelling and tasting are weaker than formerly, but his hearing is not much impaired. He occasionally feels the tingling sensation before spoken of, in his left cheek, and it is pretty constant in the right eyelids and side of the face. Ordinary sensation does not appear to have been at any time lost in any part of the body; but the motory power of the left arm is enfeebled, and he cannot grasp anything firmly with the left hand. The whole limb is wasted from muscular atrophy. He has for the most part been quite intelligent, but lately has become rather obtuse; always had control over the sphincters, but is obliged to obey the desire for urinary evacuations immediately. The breathing is slow and easy; pulse 112, weak, and small; skin cool; bowels open. He is taking the bichloride of mercury, and the gums are just beginning to look tumid. On April 14th the left eye became injected, and the cornea subsequently opaque. By the 4th of May the right eye underwent similar changes in its vascularity and transparency, and the cornea in each became subsequently ulcerated.

May 19. The patient has been progressively getting worse. He is now much emaciated; has the Hippocratic face, with slight contraction of the corrugatores superciliorum. He lies in a state of semicoma, regardless of objects around him unless roused, when he replies to questions, articulating his words imperfectly, and speedily talks unconnectedly. The tumors upon the head have each enlarged, and the posterior has become firmer; the upper eyelids are half closed, and he is unable to raise them voluntarily; the left eyeball is still more prominent, being on a plane much anterior to the right, and this globe is more covered by the lid; the conjunctiva in each is the seat of serous infiltration, with slight congestion (sub-conjunctival œdema), and each cornea is impaired by opacity and ulceration in its lower half. A transverse line, much indented, traverses the left cornea horizontally, as though the globe had been protruded against the margin of the lower lid, which, by pressure, had induced ulceration; whilst in the right cornea a

roundish ulcer seems to have removed all the laminæ, and to have merely escaped perforation through the integrity of the aqueous membrane, thus forming a curiously transparent spot completely surrounded by a zone of opacity; both corneæ were slightly vascular. He is quite blind, and no effect is produced upon the pupils, which are rather small, by bright light; the left malar bone is the seat of hard swelling with undue projection, but attended with little pain; his breath is exceedingly fetid, although he has taken no mercury for three weeks; the respiration is stertorous, and his wife tells me that he feels difficulty of deglutition, and occasional choking in the throat; he continues to discharge a bloody matter from the nose, and the nares seem obstructed by it, and air thus excluded; the pulse is 90, small, and soft; the surface and extremities warm; his appetite is poor, and his tongue, which he protrudes better, is white; bowels regular, and urine rather scanty; both evacuations have been passed voluntarily, excepting during an attack of delirious excitement two days ago, when his urine and fæces escaped unconsciously. Ammonia, wine and water, beef-tea.

27. After last report he became delirious at night, and occasionally in the day. Another tumor was discovered over the right ascending ramus of the lower jaw, which was said to have existed from the commencement of his illness, and to have steadily enlarged, but which had been concealed by a bushy whisker. It was hard, ovoid, elevated, free from tenderness, and connected with the bone. On the 22nd he had twitchings of all his limbs. Two nights ago he again became delirious, muttered unintelligibly, and seemed unconscious of the presence of any one. He could take no food, and the increased pressure on the brain was marked by a proportionate coma, with stertor in breathing. He died about eleven o'clock this morning.

Sectio Cadaveris Twenty-eight Hours after Death.

The body was extremely emaciated, and the left limbs thinner than the right. The tumor on the forehead was as large as two-thirds of a duck-egg, and that behind as big as a shilling, and little raised. The left malar bone was still swollen, firm and projecting.

Head.—The scalp over the large tumor was so adherent as to require a patient dissection for its separation. It lay beneath the occipito-frontal aponeurosis and pericranium, and was lobulated on its surface, the grooves being shallow, and of a blueish pink tinge. The smaller and softer swelling behind was cut into in reflecting the scalp, and was found to consist of a white medullary substance containing numerous red dots, lines, and patches, as though from torn vessels and ecchymosis. The bone was seen at the bottom eroded and cellular, as in necrosis. When the calvarium was removed, the large anterior tumor was found to project inwards upon the brain, its inner portion not being so prominent as the external. It was enclosed in a dense, whitish membrane, somewhat patchy, as though from old deposits of lymph in flattened granules. There were no signs of adhesion to the dura mater, no torn or ragged projections being observed upon its surface. When the calvarium was separated, the tumor was seen clearly to be a growth within the proper tissues of the bone. The small posterior substance exhibited the same characters within as without the cranium—viz., a delicate membrane, enclosing a soft, medullary, white matter, with red points and spots and a honeycomb bone at the bottom; its site was near to the posterior superior angle of the parietal bone. The large tumor, when divided through the middle, was found to consist of white, lardaceous matter deposited within the pericranium. It was divided into two portions by the bone, which traversed it nearly across the centre. The portion of cranium thus included seemed at first sight to be thicker than natural; but, upon examination, this appearance was ascertained to depend upon the deposition of the cancerous matter into the cells of the diploe, and upon a separation of the denser parts of the bone into laminæ, which were divided from each other by white lines of the same material. Besides these disjunctions of the bone in its proper axis, its continuity was destroyed by lines running vertically from the diploe to the exterior and inner surface of the skull, which established continuity between all the sections of adventitious matter. The osseous structure seemed also changed, being more transparent than natural, and having a blueish tinge. The surfaces of the bone were spicular and redder than the rest of the mass. Both of these growths had compressed the brain, the larger one making a deep and extensive indentation on the upper and back part of the left anterior lobe, the smaller faintly hollowing the back part of the right middle lobe.

The dura mater seemed whiter and somewhat thicker than common, and its sinuses contained little blood. The arachnoid was slightly opaque over the brain generally, and its cavity contained about three ounces of clear serum. The pia mater was slightly injected. The brain itself was uniformly pale and bloodless, the cineritious structure being of faint yellowish grey color. Each lateral ventricle contained about a teaspoonful of sanguinolent serum, which occupied from gravitation the posterior corner. The central parts of the cerebrum were healthy, and the velum interpositum and choroid plexuses were remarkably deficient of blood. Upon examining the base of the cranium, the sella tursica was found to be occupied by a tumor, which projected over the smaller wings of the sphenoid and fore part of the petrous bone, involving and compressing the contents of the cavernous sinuses and the fifth nerves with the Casserian ganglia. This growth had the same characters as those already described, and the bones beneath it were similarly diseased. On the left side the bones of the orbit seemed to be more changed than on the right, and by their tumefaction on the facial aspect to have protruded the globe of the eye.

Chest.—The heart was large and flaccid, and its cavities slightly and uniformly dilated. The lungs were much collapsed and healthy. There was no effusion in the pleural cavities.

Abdomen.—The liver was large, and the right lobe elongated. It was dark in colour, and contained some three or four masses of medullary or lardaceous cancer, of pulpy consistence and white color, with spots of deep red and softer quality, as though from the process of *ramollissement* and effusion of blood in consequence of ruptured vessels. One of these, occupying the acute edge of the right lobe, was as large as the palm of the hand. Its circumference was a little raised above the surrounding parts, whilst its centre was flattened. Its

appearance corresponded with that described, excepting that posteriorly it was more diffluent, and from this part a reddish white opaque fluid exuded upon division, resembling thick strawberry-cream. The spleen was rather large and congested; the pancreas healthy and congested; the other viscera exhibited no morbid changes.

REFLECTIONS.

The numbness and tingling in the left arm occurred before any external swelling was perceived. This would lead to the opinion that the disease first protruded in the interior of the cranium, and probably compressed more immediately the optic thalamus. After the existence of this symptom we saw the development of the external tumor. The limb became atrophied, and loss of power was felt, from the simultaneous extension of growth within and without the skull.

The numbness and tingling, in the first place of the left cheek, and subsequently of the right, show the early commencement of that medullary growth which was found in the base of the cranium, the extent and connections of which explain satisfactorily the altered sensations in the soft parts, the amaurosis, the discharge of blood and matter from the nose, the protrusion of the left eye, and the ptosis of the left upper lid, for it involved the optic nerves, the third, fourth, fifth, and sixth, as they pass through the cavernous sinus to enter the orbit, the pituitary body, and the sphenoidal and ethmoidal cells, as well as the bones of the orbit. The proptosis especially is worthy of notice, since the globe was not protruded by any tumor within the orbit, but by a general diminution of its size from the encroachment on the bony walls. The occurrence of opacity and ulceration of the corneæ indicated destruction of the functions of the fifth nerve, and was accompanied by a pale chemosis.

The difficulty of opening the mouth was not perhaps dependent upon any nervous lesion, but rather upon the mechanical impediment to the motions of the jaw, caused by the tumor on the ascending plate of the lower maxilla of the right side, to which must be added an indisposition arising from the state of the gums, produced by mercury. The limited protrusion of the tongue may also be referred to this latter cause.

Effusion is a common mode of termination in such diseases. It was shown in this instance before death, by the delirium succeeded by coma and stertor. But the serous fluid is not always poured into the cavities formed within the cranium, when tumors of this character affect the skull. On the contrary, it is frequently deposited in the chest or belly, according to the direction in which the malignant growths are propagated.

The white condition of the brain was remarkable. It was not the anæmial brain from loss of blood, but a peculiar pearly whiteness unlike anything I have before seen.

The tumors in the liver were unsuspected, but did not excite surprise. The frequency of such deposits in internal organs, when diseases of this character attack the external parts, is already sufficiently established; and it is only an additional proof, if one be necessary, of the inexpediency and impropriety of removing by operative measures heterologous growths of this kind from the surface of the body.

Lastly, with reference to the nature of the disease, I regard it is as white medullary, or lardaceous cancer of the bones of the cranium, and the characters of the tubera in the liver in some measure strengthen this view. I believe it to have originated in the diploe of the bone, to have separated the plates of the skull more widely, to have eventually effected a solution of continuity in them by small ulcerated apertures, to have then extended itself between the laminæ of the cranium, until at length it had completely perforated it, when it became placed between the bone and pericranium. Having gained this point, less resistance was offered to its growth under the elastic investment of the bone, and it now diffused itself more widely, so as to form a tumor upon, as well as within, the cranial cavity.

CASE OF DEFORMED LEG.

FROM

UNSUCCESSFULLY TREATED FRACTURE,

CURED BY AN OPERATION.

By Thomas D. Mütter, M.D.,

Professor of Surgery in Jefferson Med. Coll., Philadelphia.

About the last of August 1840, I was requested by Dr. Franklin to visit in consultation, George S., of Maryland, a young man of fine constitution, and twenty-three years of age. From the history of the case, it appears that some ten months prior to the period at which we saw him, he was engaged with others in blasting rocks, and that while so occupied, a large fragment of stone struck him on the right leg, producing a most severe compound fracture of both bones. He was immediately placed under treatment, but from some cause or other, profuse suppuration in the wound took place, with ulceration of the integuments on the back of the limb; and after having remained under the management of the gentlemen who first saw him, for three months, he "got up" with the leg shortened three inches and a half, from the lower fragments overlapping the upper, and the foot so much turned in, that it was impossible for him to bring the heel to the floor. The limb is also diminished in its diameter in consequence of the state of inaction in which it has remained since the occurrence of the accident, the patient having used crutches ever since his "getting up." There is no pain even when the limb is roughly handled, and no motion between the fragments, they having become firmly attached to each other by ledges or bridges of bone that passed from one to the other, and also by means of callus thrown out in the interossial space. The integument on the back of the leg presented nearly throughout the characteristics of a cicatrix, and near the centre there was a small ulcer. As in this condition the limb was worse than useless, he came to Philadelphia, for the purpose of having it amputated. After a careful examination of the case, and weighing the hazards of *amputation* and *resection* of the *bones*, both Dr. Franklin and myself came to the conclusion that the latter operation, as it gave us a prospect of saving the leg, was most advisable; and accordingly, after subjecting our patient to a few days of preparatory treatment, I undertook its per

formance, assisted by Drs. G. W. Norris and Franklin, and in the presence of several of my private pupils.

September 4. The patient was placed on his back, upon a firm table, the limb secured by assistants, and a tourniquet loosely applied to the thigh, but it was not tightened during the operation, no large vessel being opened by our incisions.

The integuments were then divided directly over the projecting fragment of the tibia, the incision commencing an inch and a half above the most prominent point, and extending downwards about the same distance below it, the soft parts were next turned off on each side by a few strokes of the scalpel, and the bone being exposed, was found to overlap the superior fragment, to which it was firmly attached by the ledges of bone already referred to; with a small saw these ledges were divided, and we found the space included between them occupied by a tissue firmer than cartilage but softer than bone, and apparently perfectly organised, as it bled freely when the saw passed through it.

The fragments of the tibia being thus separated, we turned our attention to the fibula. An incision parallel to the first, of the same extent, and about two inches from it, was carried over the projection on the outside of the leg, the bone exposed, and the bony attachments sawn through.

An attempt was now made by drawing upon the foot and ancle, to extend the limb to its proper length, but the muscles both in front and behind having become rigid, and almost unyielding from the state of retraction and rest to which they had been so long subjected, resisted all our efforts, and it was found necessary, before we could straighten the limb, to saw off one inch from the lower fragments and nearly half an inch from the upper. The muscles yielding almost two inches, permitted the adjustment of the fragments, and the foot was readily placed in its proper line. In the separation of the bones, the muscles and integuments were held aside by curved spatulæ and the rough edges of the bones smoothed off with short nippers. But one vessel required the ligature, and the patient did not lose more than six or eight ounces of blood during the whole operation, which occupied more than an hour. The fragments having been properly adjusted, the edges of the wound were brought together, retained by straps, and dressed with a light pledget of dry lint. The patient was then carefully removed to bed, and the limb placed in a fracture box, containing a soft pillow covered with oiled silk. The limb was left naked, in order that the wound might be readily dressed, and at the same time kept cool, and also that the sore on the back of the leg might be examined and attended to, as circumstances would indicate. Over the part there was placed the usual apparatus for protecting a fractured limb from the pressure of the bed-clothes. Directions were left that the patient should take weak tea and toast for diet, and the usual dose of laudanum if pain or restlessness supervened.

5. Patient comfortable; skin natural; slight excitement of pulse; passed rather a restless night; not much pain in the part, but pain in back and side; has passed urine. Ordered barley-water for diet.

6. Patient restless; bowels costive, pain in back of leg from pressure on sore; thirst; skin dry; tongue furred; pulse 90; anorexia. Ordered ol. ricini, one ounce; mist. neutral, half an ounce, every two hours; barley-water.

7. Patient better; oil operated well; still pain in the leg; with some in the *foot*.

Nothing remarkable took place for ten or twelve days, the general treatment was antiphlogistic, and the wound dressed lightly with compresses of lint moistened with warm water. Being obliged to leave the city for some days, the case was left with my friend Dr. Franklin, who had been in attendance with me up to this period. Unfortunately Dr. Franklin was taken ill, and several days elapsed before the patient was seen; and when a professional friend, sent by Dr. Franklin, saw him, he found the whole limb bathed in pus, while the *wound itself had united almost throughout* by the first intention. This pus was secreted by the ulcer on the back of the leg, which, from the pressure, had extended very considerably. The skill and attention of Dr. Baugh soon improved this condition of things, and when Dr. Franklin and myself returned to the case, we found nothing but healthy suppuration, but so profuse as to occasion great inconvenience, and materially retard the "getting up" of our patient. The occurrence of this circumstance of course obliged us to place him on a better diet, and to use tonics; with great care and attention it was ultimately overcome, and at the expiration of ten weeks, Mr. S. was placed upon crutches, the leg being almost as straight as the other, the fragments firmly united, the foot in its proper position, and a shortening of only an inch and a half. The ancle-joint at first was stiff, and the sole of the foot very sensitive; but he now, eight months after the operation, walks without difficulty, bearing the weight of the body on this limb as much as upon the other, and conceals the shortness of the leg by a shoe with a false sole.

REMARKS.

The advantages of "resection of the bones" over amputation of the whole limb, in cases similar to the one just detailed, are so obvious that it is needless to urge them; and yet there are but few examples reported in which the experiment has been tried; indeed, as far as I can learn, there are but six. M. Clemot, of Rochefort, in France, was the first to report, and he gives us the results of two cases. In each the *femur* was the bone involved. The first operation was performed on a boy in the month of December, 1834; the second on a young man aged 27, and took place in February, 1835; and in both instances the results were most satisfactory.—*Am. Jour. of Med. Sci.*, Aug., 1839.

M. Wasserfuher, of Stettin, was the next who published, and in his case also the femur was involved, and the patient a child of five years old. The operation was difficult, and followed by severe symptoms, but eventuated favorably.—*Ibid.*

Mr. Aston Key, of London, operated in October, 1838, for a badly set tibia, by resection of the bone, and the patient, an officer in the East India Company's service, recovered perfectly.—*Ibid.*

Dr. Charles Parry, of Indianapolis, Indiana, reports a case of angular deformity of the leg, consequent to fracture of both bones, cured by an operation differing somewhat from the one which I have reported, but answering the end for which it was designed. Instead

of detaching the fragments, and then sawing off the ends, he cut a triangular plug from the angle formed by the bones in front, and then brought the lower fragments in a line with the upper, treating the case afterwards as a compound fracture. The plan pursued here is identical with that first performed by Dr. J. Rhea Barton, for the relief of anchylosed joints, where the members involved formed an angle with each other. I have performed a similar operation, but the details of the case will be furnished on another occasion; I may remark, however, that the result was in the highest degree satisfactory.—*Ibid.*

My own case is the fifth in which *resection*, as it is commonly understood, has been performed.

Recently another, making the *sixth*, has been reported by my friend, Dr. J. Rhea Barton. The result was such as might have been anticipated from the combined operation of prudence, ingenuity, and talent of the highest order.—*Medical Examiner*, No. 2, 1842.—*American Journal of Med. Sci.* April, 1842.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

SOUTHERN BRANCH.

The anniversary meeting of this branch was held at Poole, on Thursday, 30th of June, and was attended principally by the neighbouring practitioners, members of the Provincial Association. Amongst those present we noticed—

Dr. Aitkin, Poole; Dr. Carnegie, Blandford; Dr. Lee, Blandford; Mr. Smart, Cranborne; Mr. Daniell, Blandford; Mr. Buckland, Shaftbury; Mr. Fookes, Stalbridge; Mr. Rowe, Wimborne; Mr. Spooner, Blandford; Mr. Sweeting, Abbotsbury; Mr. Welch, Christchurch; Mr. Heorto, Christchurch; Mr. Nott, Bere Regis; Mr. Emmett, Wareham; Mr. Welch, Downton; Mr. Place, Wimborne; Mr. Cumplin, Wimborne; Mr. West, Poole; Dr. Salter, Ryde, Isle of Wight; Mr. Bloxam, Ryde, Isle of Wight; Mr. Caruthers, Wareham; Mr. Dyer, Ringwood; Mr. Winyar, Salisbury; Mr. W. J. Wickham, Winchester.

Numerous letters were received by the secretaries, expressive of regret, that members were prevented, by distance and other circumstances, from attending at the meeting.

A letter from the late president, Dr. M'Carogher, of Chichester, was first read by the secretary, stating his inability, from circumstances over which he had no control, to attend the meeting to deliver up his chair to his successor.

The thanks of the meeting were then voted to Dr. M'Carogher, for the able services rendered to the society during his presidency; and Dr. Salter was requested to take the chair as president.

The president next called on the secretaries for their report; it was a simple transcript of the proceedings of the previous meeting. The principal point touched on in the report, alluded to the want of respondence, on the part of the Association, to the call made at the last meeting on the members, in furtherance of the great objects of the benevolent fund, which was represented as quite inadequate to the relief which ought to be available in a society so large, so influential, and so capable of meeting the wants of the destitute members of the profession.

The president next read the following address:—

After having thanked the society for the honor conferred on him, Mr. Salter said, "The Provincial Medical and Surgical Association has now existed ten years. It might seem, therefore, a work of supererogation at this time, to advert to the great and useful purposes which its institution was intended to accomplish; but as the long interval of a year separates our meetings, and it too frequently happens that few members who do not reside within a moderate distance of the place of our assembling find it convenient to attend, and, moreover, as no meeting of the society has ever before taken place in this part of the country, it might not altogether be inexpedient to reiterate the important ends aimed at by the learned and indefatigable founder of our institution. These are—

First, Collection of useful information, whether speculative or practical, through original essays, or reports of provincial hospitals, infirmaries, dispensaries, or of private practice.

Secondly, Increase of knowledge of the medical topography of England, through statistical, meteorological, geological, and botanical inquiries.

Thirdly, Investigations of the modifications of endemic, and epidemic diseases, in different situations, and at various periods, so as to trace, as far as the present imperfect state of the art will permit, their connection with peculiarities of soil or climate, or with the localities, habits, and occupations of the people.

Fourthly, Advancement of medico-legal science, through succinct reports of whatever cases may occur in provincial courts of judicature.

Fifthly, Maintenance of the honor and respectability of the profession generally, in the provinces, by promoting friendly intercourse and free communication of its members; and by establishing among them the harmony and good feeling which ought ever to characterise a liberal profession. And to adopt the language of our associate, Dr. Boisragon, of Cheltenham—"To be distinguished among our fellow men; to deserve the approbation of the wise, and good, and to secure that of the mass with whom we must necessarily come in contact, by the moral power, as well as by the physical improvements of this age of discovery, belong to the higher and grander objects of our Association."

Ten volumes of Transactions now published, constituting an important addition to the medical literature of the age, attest the zeal of our members in their labors for the advancement of medical science. It is not to be denied, and the assertion requires no qualification, that there is no body of men, with the sole exception of those who minister in holy things, the legitimate object of whose vocation is more lofty or more useful than the practitioner of medicine; and our meeting together on these occasions, is not to serve the ends of party, or to advance our own peculiar interests; but for the purpose of communicating knowledge to each other, and to furnish the means by which the physical well-being of our species is best secured. Men, by congregating together, are often stimulated to exertions which they would never

make in a state of isolation. Our Transactions, and excellent weekly Journal, are store-houses of knowledge, to which all may contribute their quota; by thus collecting together the scattered rays of knowledge from so extensive a field of observation, the most important results may be anticipated. The great improvements which have taken place in our social condition during the present century have much raised the scientific character of the provincial practitioner. The facility of intercourse by improved modes of travelling, the rapid and universal circulation of the opinions of the most celebrated medical writers of his own and of foreign countries, by means of weekly, monthly, and quarterly journals, put him, in point of information, on a par with his brethren of larger cities, whilst he has decidedly an advantage in being thrown more upon his own resources, by which the energies of his mind are more frequently called into vigorous action, whereby his intellect is strengthened, and his powers of observation increased; he thus acquires a skill in the exercise of his art that he would not otherwise attain; and though it cannot be denied that great public utility has resulted from the division of labour, even as applied to our profession, the importance of taking a practical view of the whole of medical science, including surgery, must be admitted; and this is a benefit that especially belongs to a country practitioner, who has necessarily imposed upon him the responsibility of the entire catalogue of human diseases. From this circumstance he is less likely to adopt those partial views that a more limited circle of observation has not unfrequently led men even of distinguished abilities into, to the manifest detriment of science.

If we look into the annals of medicine, we find among the long list of individuals, who have alike proved ornaments and benefactors to their country, the names of many who practised in the provinces. Darwin, Beddoes, Curry, Puttney, Parry, and Blackhall, will long hold a high rank among British medical writers; and we have happily, at the present moment, enrolled among the members of this society individuals who would do honor to any age or nation; and we can never forget that it was a provincial practitioner to whom the world is indebted for a discovery second to no other in its advantages to the whole family of mankind—need I add the name of Jenner? Jenner, the pupil and the intimate friend of the great John Hunter, whose genius and acquirements well entitled him to tread in the most distinguished paths of professional practice, was content to be a village surgeon. In reference to his great discovery, his learned biographer, Dr. Baron, thus speaks of him:—"Those who know the painful and laborious exertions of a country surgeon will see with interest and satisfaction that the love of knowledge can overcome all difficulties—that the daily demands of a toilsome and anxious calling may be duly and vigilantly fulfilled, and buoyancy enough of character left to enable a young man in a secluded situation, with little aid from books or society, to rise above every discouragement—to keep his mind constantly alive to every new source of information—to commence and carry on original investigations in many branches of physiology and natural history, and ultimately, by patience and humility of mind, to bring forward, for the use and unspeakable advantage of his fellow-creatures, one of the most valuable discoveries that ever rewarded the exertions of man." Perseverance and fixedness of purpose are qualities as much distinguishing a great mind as originality of thought; fortunately for the world, Jenner possessed these in an eminent degree. He was an active member of a small medical society in his own neighbourhood, and his biographer says, "that at the meetings of this society he was accustomed to bring forward the reported prophylactic virtues of cow-pox, and earnestly to prosecute the inquiry. All his efforts were, however, ineffectual; his brethren were acquainted with the rumour, but they looked upon it as one of those vague notions from which no accurate or valuable information could be gathered, especially as most of them had met with cases in which those who were supposed to have had cow-pox had subsequently been affected with small-pox. These discouragements did not suppress the ardor of Jenner's mind; he often recurred to the subject in these meetings; at length it became so distasteful to his companions, that I have many times heard him declare that they threatened to expel him if he harassed them with so unprofitable a subject." In connection with the name of Jenner, I cannot deny myself the pleasure this opportunity affords, of congratulating you on the luminous and conclusive communications to be found in our Transactions, from the pen of our associate, Mr. Ceely, on the subject of vaccination. That these should have been given to the world in a publication exclusively provincial, is an honor of which we might justly be proud; and nothing can more strikingly demonstrate the efficiency of our Association than the fact that it could afford to expend the munificent sum of £700 in engravings to illustrate Mr. Ceely's views. I cannot pass from this allusion to our Transactions without expressing my admiration of the many useful papers on medical topography to be found in the various volumes. I am aware that these communications are not always invested with the high interest that attaches to some other subjects, but, as they develop the causes of disease, as far as such causes arising from differences of soil, conditions of the atmosphere, moisture, temperature, and elevation of surface, distinguish the different localities, they yield to none in practical usefulness; and I trust that many years will not elapse ere the talents and industry of our members supply us with what yet remains, to give a complete topographical account of the entire country. This has been long felt to be a desideratum in British medical literature; and whilst its accomplishment will reflect honor on our Association, it cannot fail to be attended with important national advantages.

In this address, I feel that I cannot omit to notice the matter of medical relief under the new poor-law; nor entirely pass over the subject of medical reform.

With respect to the former, it would seem that there is a disposition lately evinced by the authorities, to estimate more fairly the value of the labors of the medical man; a fair principle of remuneration being once settled by the poor-law commissioners, the difficulties which have hitherto invested this subject will cease to be heard of, and the guardians deprived of the power of putting in practice their short-sighted economy, will be found choosing their medical officers

from among those who have the highest reputation for professional skill; and, in fact, in their selections for the poor, they will be guided by the same motives which actuate them in the choice of their own medical men; and as Sir Astley Cooper said, in his evidence before the House of Commons, "If the guardians choose those whom they would employ for their own families, they will never go wrong."

With respect to medical reform, it must be admitted that the general diffusion of knowledge, and the great improvement in medical education, which distinguish the present period, call for some changes; but still I think there is more to be feared from premature and crude legislation than from delay; human affairs, if unfettered and left to themselves, have, for the most part, a tendency to fall into a proper course; the present state of the medical profession, and the different grades of practitioners of which it is composed, appear to me to have grown out of the necessities of society, as now constituted, and ought not to be hastily interfered with.

The poor man must have his doctor as well as the rich, and care should be taken that he be not driven, by expense, to seek advice from sources less competent than such as now supply it to him. The general practitioner should be upheld in making proper charges for his time and skill; but for many and obvious reasons, it would be unwise to deprive him of the power of dispensing his own medicines.

If duly qualified practitioners acted under a public licence, the protection of the profession against unqualified and ignorant pretenders might well be left to the authorities of the state, and medical men would thus be relieved from the onerous and invidious task of prosecuting offenders; but the best protection of the profession is to be sought in an enlightened public, who, it must be acknowledged, are not backward in remunerating medical men for their services, and the skilful and duly qualified practitioner will always in the end have the advantage over the empiric and incompetent intruder.

The general Association has devoted much attention to this important subject, and the committee appointed by it, to communicate with the government and others, has been most assiduous in its exertions; and as far as the influence of our Association extends, I feel assured that such changes only will be recommended as, in its opinion, will subserve the interests both of the profession and the public at large.

The high estimation in which the profession is generally held, and the deference it receives from all classes, show the value which society attaches to our vocation; and, in my opinion, it cannot descend from its high position in general society as long as it maintains those exalted principles of honor and rectitude which ought always to distinguish men of a learned and liberal profession. The bearing of medical men towards each other is much observed, and nothing tends to lower them in the estimation of the public so much as exhibitions of jealousy and irregular practice. No mistake can be greater than the notion that the different grades of the profession have opposing interests; the various orders of medical men, if rightly understood and acted upon, harmonise as truly in their substantial interests with each other as they do with the calls of society and the demands of science; whoever, actuated by a selfish principle, is found following a course not in accordance with these views, will find his mistake, and perhaps when it is too late to rectify it.

In the character of our profession, high moral, as as well as considerably intellectual, qualities are expected to be found."

The thanks of the meeting having been voted to the president for his excellent address,

A retrospective report on the progress of medicine and surgery was next read by Mr. Spooner, of Blandford, the joint labor of Mr. Smart, of Cranborne, and himself. This address, most ably written, comprehensive yet practical, embracing the most worthy subjects of observation which have recently appeared, seemed to reduce within the short time of two hours *all* that was worth reading during the past year. Messrs. Spooner and Smart have consented to the printing and publication of the report, at the urgent request of the meeting.

It was next suggested that Ryde, Isle of Wight, should be the place of meeting next year, and that Mr. Bloxam, of Newport, be requested to preside.

The next resolution contained a request, that Dr. Salter, of Ryde, make a report at the meeting for 1843, of the advance of medicine and surgery during the year, which was accepted by Dr. Salter.

It was next proposed, that a committee of not more than three persons should report at the June meeting, 1843 on the character of such epidemics or endemics which may prevail during the year, and that Dr. Aitkin, of Poole, Mr. Nott, and Mr. Bloxam, form that committee.

The meeting then resolved, that a fund be raised by the members of the district, towards the publication of such reports at meetings as may be worthy of perusal; and that members be invited to subscribe not less than five shillings towards that object. (Subscriptions were immediately commenced, a list of which will be forwarded to members.)

It was next resolved, "That the members of the Southern District Branch of the Provincial Medical and Surgical Association beg to express their confidence in the general proceedings of the parent society, in reference to the subject of medical reform; but they would at the same time express their anxiety, that at the present critical period, while they bear in mind the necessity of some reform, they would at the same time watch with jealous care, lest any measure be hurried through Parliament which would in any way prove derogatory to the dignity or disturb too greatly the interests of the profession."

A committee was then appointed to draw up a memorial to Sir James Graham on the subject of medical reform, embodying the principles laid before the meeting in a letter just received from Newcastle; the chairman and secretaries were empowered to sign it in behalf of the meeting. The committee thus appointed consisted of Dr. Aitkin, Mr. Winyar, and Mr. Spooner.

On the proposition of Mr. Bloxam, seconded by Dr. Salter, it was resolved, that this meeting is of opinion, that in all cases where application is made to a medical practitioner, to report on the state of health of the applicant proposing to be insured in a life office, the party making such application be considered

as the party answerable for the payment of a fee for such a report; and that the meeting considers it only consistent with justice that such a payment should be officially paid.

The thanks of the meeting were then unanimously accorded to the mayor for the use of the room, and the members retired to dine together at the London hotel.

YORKSHIRE BRANCH.

A meeting of members of the Provincial Medical and Surgical Association, resident in Yorkshire, was held at the Museum, York, on Thursday, July 7, to form a district branch. The following gentlemen were present at the meeting:—

Mr. Alderson, Mr. James Allen, Mr. E. T. Allen, Mr. Barker, Dr. Belcombe, York; Mr. Bird, Tollerton; Mr. Brown, Mr. Brunton, York; Mr. Crosby, Great Ouseburn; Mr. Dickson, Elvington; Mr. Dodsworth, Dr. Goldie, York; Mr. W. Hey, Leeds; Mr. R. Hey, York; Dr. Hopper, Leeds; Mr. Hornby, Pocklington; Mr. Husband, Mr. Keyworth, Mr. Ketching, York; Mr. Langdale, Green Hammerton; Mr. W. Matterson, York; Mr. Ness, Felmsley; Mr. Proctor, Mr. Russell, York; Mr. Sandwith, Beverley; Dr. Simpson, Mr. Thurnam, York; Dr. Watmough, Pocklington; Mr. Williams, York.

Dr. Goldie, President of the General Association, was called to the chair, and opened the business by stating the object for which the members had been called together, and pointing out the advantages which must accrue to the profession from the institution of the parent Association and its district branches.

The president then called upon Mr. Husband, the secretary to the local council, to read a report containing the reasons which induced the council to propose the formation of a district branch, and a summary of those questions affecting the interests of the profession which appeared worthy of notice.

We can only give a brief outline of the report.

The report commenced by stating the reasons for the formation of the district branch. "Migrating, as does the parent Association, from south to north, from east to west, that warmth and zeal may be diffused by its presence into every part of its extensive domain, the cycle of its visits can revolve but slowly, and hence absence may engender apathy, and the very means which, *a priori*, appeared most calculated to secure its prosperity, may prove its downfall. But the same wisdom and sagacity which originated the Association have provided a remedy against this probable element of self-destruction. If the parent Association be occupied at a distance, it supplies a substitute in its offspring, and the district branch may, under proper culture, become the worthy scion of a noble stock.

"Deeply impressed, then, with a sense of the importance of the district branches, as means of maintaining an interest in the welfare of the parent Association, and of enabling many, whose avocations prevent them from undertaking distant journies, to express their opinions on the stirring events now affecting the profession, and to forward that interchange of opinion which union alone can accomplish, the local council for this city determined to attempt the formation of a district branch, to be called the York District Branch of the Provincial Medical and Surgical Association. The local council submit that no place is more suitable for the formation of a district branch than that which had the honor of introducing the parent Association to the hitherto unexplored regions of the north. The council appealed to their professional brethren in this county, and their appeal was responded to with an alacrity and zeal, which they beg to acknowledge with feelings of unmingled satisfaction."

The order in which the business of the district branches is conducted was next pointed out, and a brief notice taken of several questions of medical polity. After detailing the steps taken by the central council at Worcester, during the past year, to secure a moderate but efficient scheme of medical reform, the report thus alluded to the necessity of uniformity of qualification:—

"The local council feel that it would be unbecoming in them to dictate to the members present as to the plan of medical reform which is best adapted to the wants of the profession, but would only remark, that all seem now to agree with the central council that an uniformity of qualification is absolutely required, and that this provision, while it leaves the privileges of existing corporations in some measure inviolate, will secure for the profession an uniform test of fitness for its arduous duties."

After some notice of the new medical orders of the poor-law commissioners, and a well-deserved eulogy of the laborious exertions of the poor-law committee of the parent Association, the report thus alluded to the systems of tender and contract:—

"The system of tender—a disgrace to a liberal profession—has been abolished; and it must be a subject of congratulation to us all that we shall not again hear of men being enabled to lower the value of professional services, while they themselves can reap but a scanty reward from their own degradation. The practice of contract is still to be continued; but this council would express a hope that a system of liberality will be adopted, which will place the medical practitioner in that situation which is due to himself as an individual, and to the profession to which he belongs."

The claims of the benevolent fund on the generosity of the members were next strongly urged, and the report, after alluding to the advantages which must result from the interchange of opinion on every department of medical science, concluded by an urgent appeal for support in the effort now made to assist kindred institutions in securing the efficiency and respectability of the medical profession.

Mr. Sandwith moved, and Mr. Ness seconded, a resolution, "That the determination of the local council to form a York District Branch be confirmed by this meeting."

Dr. Hopper, after stating that many medical gentlemen in Leeds and the West Riding were anxious to join the branch, and had requested him to state their wish to the meeting, objected to confining the branch to the limited district proposed by the local council, and argued that its usefulness would be increased by extending it to the whole of the county. Dr. Hopper moved the following amendment:—

"That the determination of the local council to form a district branch be confirmed, but that this branch be called the Yorkshire District Branch of the Provincial Medical and Surgical Association."

Mr. W. Hey seconded the amendment, and confirmed the statement of Dr. Hopper respecting the general feeling in Leeds, that the branch should include the whole of the county.

After considerable discussion, the amendment was carried by a large majority.

Rules for the government of the branch were then adopted, after which Dr. Simpson was chosen president-elect for the ensuing year, and Mr. Husband secretary and treasurer. The following gentlemen were appointed to constitute the district council for the ensuing year:—Dr. Goldie, Dr. Belcombe, Mr. Brown, Mr. Williams, Mr. R. Hey, Mr. Russell, Mr. James Allen, and Mr. Dodsworth, York; Mr. Hey, Mr. W. Hey, Dr. Hopper, Mr. Garlick, Mr. Smith, Mr. Teale, Leeds; Mr. Sandwith, Beverley; Dr. Whylehead, Easingwold; Mr. Ness, Helmsley.

As much time had been spent in considering the constitution and rules of the branch, the questions of medical reform and the poor laws were unavoidably deferred.

The following memoirs and cases were submitted to the meeting, and elicited some interesting and valuable remarks.

1. A paper on Diabetes, by Dr. Belcombe.

2. A Case of Fatal Hæmorrhage from a Wound of the Carotid Artery, by Mr. W. Hey.

3. A paper on Perforation of the Stomach, with two Cases, by Mr. Williams.

The following communications could not be read, on account of the length of time which the proceedings had already occupied:—

A Case of Dislocation of the Cervical Vertebræ, by Mr. R. Hey.

A paper on the Weight of the Heart, by Mr. Thurnam.

A Case of Ossified Gall-bladder, by Mr. Dodsworth.

We hope to be permitted to insert most of the above in the pages of this Journal.

A vote of thanks was passed by acclamation to the president, and the members proceeded to dine together at the George Inn.

The next meeting will be held at York on Thursday, June 29, 1843.

CONVERSION OF BENZOIC INTO HIPPURIC ACID.

In a paper published in the 12th number of the "Pharmaceutical Transactions" Mr. Ure alludes to some recent investigations on the interesting subject of the conversion of benzoic acid into hippuric acid in the human subject.

The presence of hippuric acid in the urine, after the administration of benzoic acid, has been confirmed by Mr. Garrod, who says, "I have repeatedly performed Dr. Alex. Ure's experiment, swallowing from a scruple to half a drachm of benzoic acid at a time, and have always obtained a copious crop of crystals of hippuric acid, amounting to from fifteen to twenty-nine grains, by the addition of hydrochloric acid to the urine passed about three or four hours afterwards (evaporated or not, according to its state of dilution). These crystals possessed all the characters of hippuric acid, with the crystalline form, the small solubility in alcohol, the evolution of nitrogen, and also the odour of the Tonquin bean, when heated to destruction; and my experiments therefore so far confirm Dr. A. Ure's fundamental observation."

Mr. Garrod mentions his having always been able to obtain a distinct trace of uric acid from human urine containing hippuric acid. This had been also observed by M. Bouchardat.

Mr. Garrod has suggested a very ingenious theory for explaining the manner in which the benzoic acid is converted into the hippuric, a theory likewise put forth by Liebig, in his recent work on Animal Chemistry, p. 150. According to this theory, one equivalent of lactate of urea minus two equivalents of water give the requisite elements for the conversion of two equivalents of benzoic acid into two equivalents of hippuric acid. The following formula will express this more clearly:—

Benzoic acid (2 eqs.) . .	C_{28} H_{10} O_6
Lactate of urea (1 eq.) .	C_8 H_8 O_6 N_2
	C_{36} H_{18} O_{12} N_2
Minus	H_2 O_2 (2 eqs.)
	C_{36} H_{16} O_{10} N_2

= Hip. acid (2eqs) C_{36} H_{16} O_{10} N_2

In opposition to this theory, Mr. Ure brings forward the following experiment:—

"On the 20th April last, one hour after breakfast, I swallowed a scruple of cinnamic acid, procured by Mr. Bell, of Oxford-street, from the decomposition of cinnamon water. In the course of three hours afterwards I collected the urine voided, and which amounted to about 4½ ounces. It was of a pale hue, and of a specific gravity of 1.024. A portion of this urine being allowed to evaporate spontaneously upon a slip of glass, and a drop of muriatic acid added, minute acicular crystals, radiating from a centre, ere long made their appearance. These having been re-crystallised, and examined by the microscope, were seen to consist of quadrangular prisms, with dihedral summits. On exposure to heat they melted into an oleaginous mass, and exhaled the fragrant odor of Tonquin bean—all distinctive characters of hippuric acid of which I thus obtained several grains."

If we apply the arithmetical formula to this fact, substituting the cinnamic for the benzoic acid, we obtain a result (says Mr. Ure) wholly incompatible with the hypothesis in question.

For two equivalents of cinnamic acid + one of lactate of urea—two of water will give C_{44} H_{20} O_{10} N_2, while two equivalents of hippuric acid give C_{36} H_{16} O_{10} N_2, leaving C_8 H_4 to be accounted for.

EFFECTS OF DATURA.

For the purpose of facilitating theft, and other criminal designs, the seeds of datura are very commonly given in Bengal with sweetmeats to stupify merely, but not with the intention of killing; intoxication or delirium is seldom produced, the individual sinks into

profound lethargy resembling coma, with dilated pupils, but natural respiration. These symptoms have been known to continue even for two days, and still recovery take place; cold affusion and strong stimulant emetics constitute the most effectual treatment. The vision often continues obscured long after the general recovery takes place. This state is best remedied by blisters to the temples or nape of the neck, and by cold affusion.

If given while the stomach is empty, a much smaller dose may induce all the preceding symptoms, and prove fatal. This is well known to the Indian poisoners, who suit the time of administration according to the purpose they mean to serve.—*Bengal Dispensatory.*

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JULY 16, 1842.

The select committee appointed by the House of Commons "to inquire into the evils arising from the interment of the dead within large towns," &c., have brought their labors to a close, and agreed upon certain remedial measures, which we trust will soon be embodied in an Act of Parliament. Before laying the substance of the report before our readers, we think it right to return our sincere and cordial thanks to Mr. Mackinnon, the chairman of the committee, for the indefatigable zeal with which he has pursued this question, and for the talented manner in which he has conducted the inquiry.

To those who are acquainted with the subject of public health, and know how shamefully all matters connected with it have hitherto been neglected by the legislature, it is matter of great consolation to find that we have a few men, like Mr. Mackinnon, who are content to devote their time and talents to the humble task of protecting the health of their fellow-creatures.

The chief points to which the attention of the committee was directed were—

1. Whether the custom of interments within the precincts of large towns or populous places, be injurious to the health of the community.

2. In the event of the injury being proved, to point out the remedies.

3. To suggest some means of preventing the proposed remedies from interfering with vested rights.

In reference to the first subject of inquiry, the committee have received evidence from persons in every class of life. That of some of the sextons and gravediggers in the metropolis exhibits a loathsome picture of the unseemly and demoralising practices which result from the crowded condition of the existing graveyards—practices which could scarcely have been thought possible in the present state of society. The committee also obtained the evidence of men of a superior education and acknowledged ability; of gentlemen at the head of the medical and surgical professions; of clergymen and high dignitaries of the church; and, after a long and patient investigation, the committee arrive at the conclusion, that the nuisance of interments in large towns, and the injury arising to the health of the community from the practice, are fully proved.

The injurious effects of intramural sepulture were abundantly proved by the medical evidence of Mr. G. A. Walker, Mr. Lane, Dr. Collier, Mr. Atkinson, Mr. Baker of Leeds, Sir James Fellowes, Dr. James Copland, Dr. Jordan, R. Lynch, Dr. Holt Yates, and Sir B. Brodie. The only contradictory evidence furnished was that given by Professor Todd, of King's College, who did not think that "typhus or typhoid fever could arise as an immediate consequence of emanations from decaying animal or vegetable matter."

Amongst the medical evidence, the committee particularly allude to the testimony of Sir James Fellowes, Sir B. Brodie, Dr. Copland, Dr. Chambers, and Mr. Walker. Sir J. Fellowes says—

"It becomes a serious question, with an increased and increasing population, upon what rational grounds such an objectionable feature can be longer continued without danger to the public health."

Dr. Copland says—

"I believe that the health of large towns is influenced by four or five particular circumstances: the first, and probably the most important, is the burial of the dead in large towns. In considering the burials in large towns, we have to consider not only the exhalation of the gases and the emanations of the dead into the air, but the effect that it has on the sub-soil or the water drunk by the inhabitants."

Sir Benjamin C. Brodie, when asked whether he considered the crowded state of the churchyards as one cause of fever or disease in the metropolis, answers, "I have always considered that as one cause." "My opinion is, that the interments in the interior of this town must be injurious to the health of the town." And W. F. Chambers, Esq., M.D., in his letter to the chairman, states, "I have no doubt that the fevers which are called typhus, even in this cleanly quarter of London (Brook-street), owe their origin to the escape of putrid miasma. I should presume that overcrowded burying-grounds would supply such effluvia most abundantly."

With respect to the second point of their inquiry, the committee offer certain suggestions which are comprised in their resolutions; and on the third point (or protection of vested rights) they show that due attention has been paid to the interests of the parochial clergy.

The following are the resolutions adopted by the committee, after a long and patient investigation of the subject:—

"1. That the practice of interment within the precincts of large towns is injurious to the health of the inhabitants thereof, and frequently offensive to public decency.

2. That in order to prevent or to diminish the evil of this practice, it is expedient to pass an Act of Parliament.

3. That legislation upon the subject be, in the first instance, confined to the metropolis and to certain other towns or places the population of which respectively at the last census exceeded 50,000.

4. That burials be absolutely prohibited, after a certain date, within the limits of such towns or places, except in the case of family vaults already existing, the same partaking of the nature of private property, and being of limited extent.

5, That certain exceptions, as applying to eminent public characters, be likewise admitted with regard to Westminister Abbey and to St. Paul's.

6. That certain exceptions be likewise admitted with regard to some cemeteries of recent construction, according to special local circumstances, to be hereafter determined.

7. That within the dates which may be specified the parochial authorities in such towns or places be empowered and required to impose a rate for the purpose of forming cemeteries at a certain distance from the same.

8. That a power be given to the parochial authorities of two or more parishes or townships of the same town to combine, if they think proper, for the same cemetery.

9. That a *minimum* of distance be fixed for such cemeteries, from the same motive that leads to their establishment—the public health; and that a *maximum* of distance be likewise fixed, so as to secure the lower classes, as far as possible, from the hardship of loss of time, or weariness in proceeding to a great distance to attend the funerals of their relatives.

10. That the parochial authorities be responsible for the due and decent administration of each burial within the new cemeteries, in the same manner as they now are within the present churchyards; and that, on the other hand, they be entitled to the same amount of fees on each burial as they at present receive.

11. That due provision be made for the perpetual possession by the parishes or townships of the ground on which the cemeteries shall be made.

12. That due space be reserved, without consecration, and within the limits of the intended cemeteries, for the separate burials of such persons or classes of persons as may be desirous of such separation.

13. That no fees from any such burials in unconsecrated ground be payable to any ministers of the Church of England.

14. That, subject to the conditions expressed in the 10th and 13th resolutions, arrangements be made to equalise as far as possible the total amount of fees payable on burials within the same cemetery, whether in the consecrated or the unconsecrated ground.

15. That considering the difficulty of fixing the same date for the prohibition of burials within the limits of different towns, or the same distance for the construction of the new cemeteries, and the importance of having reference to various local circumstances, it does not appear desirable to observe in all cases an uniform rule in these respects, but that the time and manner of applying the principles set forth in the foregoing resolutions should be entrusted either to some department of the Government, or to a board of superintendence, to be constituted by the Act of Parliament.

16. That the duty of framing and introducing a bill on the principles set forth in the foregoing resolutions, would be most efficiently discharged by her Majesty's Government, and that it is earnestly recommended to them by the committee."

We shall take another opportunity of directing attention to the medical evidence collected by the committee on this subject, and of examining one or two points which seem to demand further investigation. We cannot, however, lay aside the question of intramural sepulture for the present without "rendering unto Cesar the things that are Cesar's," and acknowledging the obligations which we owe to Mr. G. A. Walker for the public spirit which he has evinced during the whole of this delicate and difficult inquiry. To Mr. Walker is due the merit of having first strongly directed public attention to the evils arising from the interment of bodies in towns; through Mr. Walker's zeal a great portion of the evidence given before the committee was obtained, and now that the inquiry has been conducted to a satisfactory conclusion, we trust that some mark of public respect will be bestowed on the author of a measure from which the public must reap such great and enduring advantages.

REVIEWS.

*Animal Chemistry; or, the Application of Organic Chemistry to the Elucidation of Physiology and Pathology.** By Justus Liebig. Edited by William Gregory, M.D. London: Taylor and Walton, 1842.

The first part of Professor Liebig's Report consists of the examination of the processes employed in the nutrition and reproduction of the various parts of the animal economy. In vegetables, as well as in animals, we recognise the existence of a force in a state of rest. It is the primary cause of growth or increase in mass of the body, in which it resides. By the action of external influences, such as by pressure of air and moisture, its condition of static equilibrium is disturbed; and entering into a state of motion or activity, it occupies itself in the production of forms. This force has received the appellation of *vital force*, or *vitality*. Vitality, though residing equally in the animal and vegetable kingdoms, produces its effects by widely different instruments. Plants subsist entirely upon manures belonging to inorganic nature. Atmospheric air, the source whence they derive their nutriment, is considered to be a mineral by the most distinguished mineralogists. All substances, before they can form food for plants, must be resolved into

* We were about to prepare an analysis of this admirable work, when that read by Dr. Playfair before the British Association came under our notice. As we could not hope to improve on this clear and complete analysis, we have transferred it to our pages from the "Athenæum."

inorganic matter. But animals, on the other hand, require highly-organised atoms for nutriment. They can only subsist upon parts of an organism. They possess within them a vegetative life, as plants do, by means of which they increase in size, without consciousness on their part; but they are distinguished from vegetables, by their faculties of locomotion and sensation—faculties acting through a nervous apparatus. The true vegetative life of animals is in no way dependent upon this apparatus, for it proceeds when the means of voluntary motion and sensation are destroyed; and the most energetic volition is incapable of exerting any influence on the contractions of the heart, on the motion of the intestines, or on the processes of secretion. All parts of the animal body are produced from the fluid circulating within its organism, by virtue of vitality, which resides in every organ. A destruction of the animal body is constantly proceeding. Every motion, every manifestation of force, is the result of the transformation of the structure, or of its substance. Every conception, every mental affection, is followed by changes in the chemical nature of the secreted fluids. Every thought, every sensation, is accompanied by a change in the composition of the substance of the brain. It is to supply the waste thus produced that food is necessary. Food is either applied in the increase of the mass of a structure (that is, in nutrition), or it is applied in the replacement of a structure wasted (that is, in reproduction). The primary condition for the existence of life is the reception and assimilation of food. But there is another condition equally important—the continual absorption of oxygen from the atmosphere. All vital activity results from the mutual action of the oxygen of the atmosphere and the elements of the food. All changes in matter proceeding in the body are essentially chemical, although they are not unfrequently increased or diminished in intensity by the vital force. The influence of poisons and remedial agents on the animal economy proves, that the chemical combinations and decompositions proceeding therein, and which manifest themselves in the phenomena of vitality, may be influenced by bodies having a well-defined chemical action. Vitality is the ruling agent by which the chemical powers are made to subserve its purposes; but the acting forces are chemical. It is from this view, and no other, that we ought to view vitality.

According to Lavoisier, an adult man takes into his system, every year, 837 lbs. of oxygen, and yet he does not increase in weight. What, then, becomes of the enormous quantity of oxygen introduced in the course of the year into the human system? The carbon and hydrogen of certain parts of the body have entered into combination with the oxygen introduced through the lungs and through the skin, and have been given out in the form of carbonic acid, and the vapor of water. At every moment, with every expiration, parts of the body are thus removed, and are emitted into the atmosphere. No part of the oxygen inspired is again expired as such. Now it is found that an adult inspires 32½ oz. of oxygen daily. This will convert the carbon of 24 lbs. of blood into carbonic acid. He must, therefore, take as much nutriment as will supply this daily loss; and, in fact, it is found that he does so; for the average amount of carbon in the daily food of an adult man, taking moderate exercise, is 14 oz., which require 37 oz. of oxygen for their conversion into carbonic acid. But it is obvious, as the inspired oxygen can be removed only by its conversion into carbonic acid and water, that the amount of food necessary for the support of the animal body, must be in direct ratio to the quantity of oxygen taken into the system. Thus, a child, in whom the organs of respiration are naturally in a state of great activity, requires food more frequently, and in greater proportion to its bulk, than an adult, and is also less patient of hunger. A bird, deprived of food, dies on the third day; whilst a serpent, which inspires a mere trace of oxygen, can live without food for three months. The capacity of the chest in an animal, is a constant quantity. We, therefore, inspire the same *volume* of air, whether at the pole or the equator. But the weight of the air, and consequently of the oxygen, varies with the temperature. Thus, an adult man takes into the system daily 46,000 cubic inches of oxygen, which, if the temperature be 77°, weigh 32½ oz; but when the temperature sinks down to the freezing point (32°), it will weigh 35 oz. Thus, an adult in our climate in winter may inhale 35 oz. of oxygen; in Sicily he would inspire only 28½ oz.; and if in Sweden, 36 oz. Hence, we inspire more carbon in cold weather, when the barometer is high, than we do in warm weather; and we must consume more or less carbon in our food in the same proportion. In our own climate, the difference between summer and winter in the carbon expired, and therefore necessary for food, is as much as an eighth. Even when we consume equal weights of food, an infinitely wise Creator has so adjusted it as to meet the exigencies of climate. Thus, the fruit on which the inhabitants of the south delight to feed, contains only 12 per cent. of carbon, whilst the bacon and train oil enjoyed by the inhabitants of the Arctic regions, contain from 66 to 80 per cent. of the same element.

Now the mutual action between the elements of food and the oxygen of the air, *is the source of animal heat.* All living creatures, whose existence depends on the absorption of oxygen, possess within themselves a source of heat, independent of the medium in which they exist. This heat, in Professor Liebig's opinion, is wholly due to the combustion of the carbon and hydrogen contained in the food which they consume. Animal heat exists only in those parts of the body through which arterial blood (and with it oxygen in solution) circulates. The carbon and hydrogen of food, in being converted by oxygen into carbonic acid and water, must give out as much heat as if they were burned in the open air. The only difference is, that this heat is spread over unequal spaces of time; but the actual amount is always the same. The temperature of the human body is the same in the torrid as in the frigid zone. But as the body may be considered in the light of a heated vessel, which cools with an accelerated rapidity the colder the surrounding me-

dium, it is obvious that the fuel necessary to retain its heat must vary in different climates. Thus, less heat is necessary in Palermo, where the temperature of the air is that of the human body, than in the Polar regions, were it is about 90° lower. In the animal body, the food is the fuel; and, by a proper supply of oxygen, we obtain the food given out during its combustion in winter. When we take exercise in a cold atmosphere, we respire a greater amount of oxygen, which implies a more abundant supply of carbon in the food; and, by taking this food, we form the most efficient protection against the cold. A starving man is soon frozen to death; and every one knows that the animals of prey of the Arctic regions are far more voracious than those of the torrid zone. Our clothing is merely an equivalent for food; and the more warmly we are clothed, the less food we require. Were we to go destitute of clothes, like certain savage tribes,—or if, in hunting or fishing, we were exposed to the same degree of cold as the Samoyedes,—we could with ease consume 10 lbs. of flesh, and, perhaps, a dozen tallow candles into the bargain, as warmly clad travellers have related, with astonishment, of those people. Then could we take the same quantity of brandy or blubber of fish, without bad effects, and learn to appreciate the delicacy of train oil.

We thus perceive an explanation of the apparently anomalous habits of different nations. The maccaroni of the Italian, and the train oil of the Greenlander and the Russian, are not adventitious freaks of taste, but necessary articles fitted to administer to their comfort in the climates in which they have been born. The colder the region, the more combustible must the food be. The Englishman in Jamaica perceives with regret the disappearance of his appetite, which, in England, had been a constant recurring source of enjoyment. By the use of aromatics, he creates an artificial appetite, and eats as much food as he did at home. But he thus unfits himself for the climate in which he is placed; for sufficient oxygen does not enter his system to combine with the carbon consumed; and the heat of the climate prevents him taking exercise to increase the number of his respirations. The carbon of the food is therefore forced into other channels, and disease results. England, on the other hand, sends her dyspeptic patients to southern climates. In our own land their impaired digestive organs are unable to fit the food for that state in which it best unites with the oxygen of the air, which therefore acts on the organs of respiration themselves, thus producing pulmonary complaints. But when they are removed to warmer climates, they absorb less oxygen, and take less food; and the diseased organs of digestion have sufficient power to place the diminished amount of food in equilibrium with the respired oxygen. Just as we would expect from these views, in our own climate, hepatic diseases, or diseases arising from excess of carbon, are more prevalent in summer, and in winter pulmonic diseases, or those arising from an excess of oxygen.

Professor Liebig then goes on to disprove the notion that animal heat is due to nervous influence, and not to combustion—an error which had its origin in supposing that the combustion proceeds in the blood itself. He also shows that animal heat must not be ascribed to the contraction of the muscles. The Professor proceeds to prove, that the heat evolved by the combustion of carbon in the body is sufficient to account for the phenomena of animal heat. He shows that the 14 ounces of carbon which are daily converted into carbonic acid, in an adult, disengage no less than 197.477° of heat—a quantity which would convert 24 lbs. of water, at the temperature of the body, into vapor. And if we assume that the quantity of water vaporized through the skin and lungs amounts to 3 lbs. then we have still 146.380° of heat to sustain the temperature of the body. And when we take into calculation the heat evolved by the hydrogen of the food, and the small specific heat possessed by the organs generally, no doubt could be entertained that the heat evolved in the process of combustion, to which the food is subjected in the body, is amply sufficient to explain the constant temperature of the body. From what has preceded, it is obvious that the amount of carbon consumed in food ought to depend on the climate, density of air, and occupation of the individual. A man will require less carbon when pursuing a sedentary occupation than when he is engaged in active exercise.

Professor Liebig, having thus discussed the source of animal heat, proceeds next to consider what are the ingredients in the food, which may properly be considered to be nutritious. Physiologists conceive that the various organs in the body have originally been formed from blood. If this be admitted, it is obvious that those substances only can be considered as nutritious which are susceptible of being transformed into blood. The Professor then enters upon an examination of the composition of blood, and of the identity in chemical constitution of fibrine and albumen. The nutritive process is simplest in the case of the carnivora. This class of animals live on the blood and flesh of the graminivora, whose blood and flesh is identical with their own. In a chemical sense, therefore, a carnivorous animal, in taking food, feeds upon itself; for the nutriment is identical in composition with its own tissues. The Professor then inquires from what constituents of vegetables the blood of the graminivorous animals is produced. The nitrogenised compounds of vegetables forming the food of graminivorous animals are called vegetable fibrine, vegetable albumen, and vegetable caseine. Now, analysis has led to the interesting result, that they are exactly of the same composition in 100 parts; and, what is still more extraordinary, they are absolutely identical with the chief constituents of the blood—animal fibrine and animal albumen. By identity, be it remarked, we do not imply similarity, but absolute identity, even as far as their inorganic constituents are concerned. These considerations showed the beautiful simplicity of nutrition. In point of fact, vegetables produce, in their inorganism, the blood of all animals. Animal and vegetable life are therefore most closely connected. The Professor has still to account for the use of the substances in food which are absolutely destitute of nitrogen, but which we know are absolutely necessary to

animal life. In all these we find a great excess of carbon, and but very little oxygen. By a train of admirable reasoning, the Professor arrives at the interesting conclusion, that they are solely exhausted in the production of animal heat, being converted by the oxygen of the air into carbonic acid and water. This portion of the report contains an ingenious and important view of the use of bile in the animal economy, the truth of which quantitative physiology dare not deny. When exercise is denied to graminivorous and omnivorous animals, this is tantamount to a deficient supply of oxygen. The carbon of the food not meeting with sufficient oxygen to consume it, it passes into the compounds containing a large excess of carbon and deficiency of oxygen; or, in other words, fat is produced. Liebig concludes, that fat is altogether an abnormal and unnatural production, arising from the adaptation of nature to circumstances, and not of circumstances to nature—altogether arising from a disproportion of carbon in the food to that of the oxygen respired by the lungs, or absorbed by the skin. Wild animals in a state of nature do not contain fat. The Bedouin, or Arab of the Desert, who shows with pride his lean, muscular, sinewy limbs, is altogether free from fat. And the Professor points out the diseases arising from this cause. From all that has transpired, we may sum up the nutritious elements of food as follows:—The ingredients adapted for the formation of the blood, and which the Professor calls the plastic elements of nutrition, are as follows:—Vegetable fibrine, vegetable albumen, vegetable caseine, animal flesh, and animal blood. The other ingredients of food being fitted to retain the temperature of the body, he calls the elements of respiration. They are—fat, starch, gum, cane sugar, grape sugar, sugar of milk, pectine, bassorine, beer, wine, spirits. These are Professor Liebig's general principles of nutrition.

The second part of the work consists of details, in which he examines the chemical processes engaged in the production of bile, of urea, uric acid and its compounds, as well as of cerebral and nervous substance. In the Professor's explanatory remarks on digestion, he ascribes a singular function to saliva. This fluid possesses the remarkable property of enclosing air in the shape of froth, in a far higher degree even than soap-suds. This air, by means of the saliva, accompanies the food into the stomach, and there its oxygen enters into combination with the constitutents of the food, whilst its nitrogen is again given out through the lungs or skin. The longer digestion continues, the greater is the quantity of saliva, and consequently of air, which enters the stomach. Rumination, in certain graminivorous animals, has plainly for one object a renewed and repeated introduction of oxygen. The Professor further touches upon the use of tea and coffee as an article of food. Recent chemical research has proved, that the active principles of tea and coffee—viz. teine and caffeine—are absolutely one and the same body, perfectly identical in every respect. The action of tea and coffee on the system must be therefore the same. How is it that the practice of taking them has become necessary to whole nations? Caffeine (teine) is a highly nitrogenised body Bile, as is well known, contains an essential nitrogenised ingredient—taurine. Now, Professor Liebig considers, that caffeine goes to the production of this taurine; and if an infusion of tea contains only one-tenth of a grain of caffeine, still if it contribute, in point of fact, to the formation of bile, the action even of such a quantity cannot be looked upon as a nullity. Neither can it be denied, that, in case of using an excess of non-azotised food, or deficiency of motion, which is required to cause the change of matter in the tissues, and thus to yield nitrogenised matter of the bile, that in such a condition the state of health may be benefited by the use of tea or coffee, by which may be furnished the nitrogenised product produced in the healthy state of the body, and essential to the production of an important element of respiration. The American Indian, with his present habits of living solely on flesh, could not with any comfort use tea as an article of food; for his tissues waste with such rapidity that, on the contrary, he has to take something to retard this waste. And it is worthy of remark, that he has discovered in tobacco smoke a means of retarding the change of matter in the tissues of the body, and thereby of making hunger more endurable. Nor can he withstand the captivation of brandy, which, acting as an element of respiration, puts a stop to the change of matter, by performing the function which properly belongs to the products of the metamorphosed tissues.

The third part of Professor Liebig's Report treats of the recondite laws of the phenomena of motion. As it is principally of a speculative character, we can pass this over. The Professor concludes his communication by two chapters; one on the theory of disease; the other on the theory of respiration. The whole life of animals consists of a conflict between chemical forces and the vital powers. In the normal state of the body of an adult, both stand in equilibrium. Every mechanical or chemical agency which disturbs the restoration of this equilibrium is a cause of disease. Disease occurs when the resistance offered by the vital force is weaker than the acting cause of disturbance. Death is that condition in which chemical or mechanical powers gain the ascendancy, and all resistance on the part of the vital force ceases. Every abnormal condition of supply or waste may be called disease. It is evident that one and the same cause of disease—that is, of disturbance—will have different effects, according to the period of life. A cause of disease, added to the cause of waste, may in old age annihilate the resistance of the vital powers, or, in other words, occasion death; while in the adult state, it may produce only a disproportion between supply and waste; and in infancy only an abstract state of health—*i. e.*, an equilibrium between supply and waste. Professor Liebig argues, from what has preceded, that a deficiency of resistance in a living part to the cause of waste is in fact a deficiency of resistance to the action of the oxygen of the atmosphere. The Professor's theory may be compared to a self-regulating steam-engine. The body, in regard to the production of heat and of force, acts just like one of those machines. With the lowering of the external temperature, the respiration becomes deeper and more frequent; oxygen is supplied in greater quantity, and of greater density; the change of matter is increased, and more food must be supplied, if the temperature of the body is to remain unchanged.

It has been proved, that iron is not necessary to the coloring matter of the blood, but that it forms an essential constituent of blood globules. These globules, it is well known, take no part in nutrition. Professor Liebig conceives, that the iron is the great means of conveying to the lungs the carbonic acid formed in the system; and he has made a calculation, that the iron contained in the body could actually convey twice as much carbonic acid as is expelled daily from the system.

ACADEMY OF SCIENCES, PARIS.

July 4.

ARTIFICIAL LUMBAR ANUS.

M. Amussat read a memoir on the possibility of establishing an artificial lumbar anus in children born with imperforate anus. After having given a sketch of the various operations employed in cases of this kind, the author remarked that Littre's method was the only one had recourse to previously to his (M. A.'s) researches. With respect to children, anatomy proves that the operation which the author has proposed is more easily applied to them than to adults, because the relative position of the different organs is more constant.

TREATMENT OF SMALL-POX.

In a discussion on small-pox, M. Serres alluded to the influence of light on the development of the small-pox pustule. He had made numerous experiments by covering the pustules with small glass cups, and observed that they were developed, modified in their progress, or completely arrested, according to the degree of transparency of the glass.

MEETING AT NOTTINGHAM ON MEDICAL REFORM.

At a meeting of the medical practitioners of Nottingham and the neighbourhood, held at the Assembly Rooms, Low Pavement, on Tuesday evening, July 12, 1842, Dr. Hutchinson in the chair, the following resolutions were agreed to :—

1. That petitions be presented to her most gracious Majesty the Queen, and also to the House of Commons, praying that no charter be granted to the Colleges of Physicians and Surgeons in London, or to any medical institution, until the whole subject of medical reform be brought forward and fully discussed before Parliament.

2. That the chairman write to and request his Grace the Duke of Newcastle to present the petition to the Queen.

3. That the petition to the House of Commons be entrusted for presentation to the Right Hon. Lord John Russell.

4. That the thanks of this meeting be presented to Thomas Wakley, Esq., M.P., for his indefatigable exertions in and out of Parliament in the cause of medical reform.

5. That the proceedings of this meeting, with its resolutions, be transmitted to the "Lancet," "Medical Gazette," and "Provincial Medical Journal."

6. That a copy of these resolutions be also sent to the members for the town and county of Nottingham, requesting them to support the objects of the petitions.

(Signed) R. Hutchinson, M.D., Chairman.

The chairman having left the chair, it was resolved,

7. That the thanks of this meeting be given to Dr. Hutchinson for his gentlemanly conduct in the chair.

The following is a copy of the petitions to her most gracious Majesty the Queen, and to the House of Commons, with the signatures of the medical practitioners:—

To the Right Honorable and Honorable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The Petition of the undersigned Physicians and Surgeons of Nottingham and its Neighbourhood,

Humbly sheweth,

That your petitioners have been credibly informed that the Right Hon. the Secretary of State for the Home Department intends to ask leave of your honorable house to introduce a bill this session to enable her Majesty to grant a new charter to the Royal Colleges of Physicians and Surgeons. Your petitioners believing that the granting such a charter would prejudge the general question of medical reform, and might be highly injurious to the interests of the general body of the medical profession, pray that no measure may be entertained by your honorable house with reference to granting a new charter to the Colleges of Physicians and Surgeons in London, or any other measure of partial medical legislation be taken into consideration by your honorable house, until the whole subject of medical reform be brought before Parliament, and receive full publicity and discussion.

To the Queen's Most Excellent Majesty.

The dutiful Petition of the undersigned Physicians and Surgeons, residing in Nottingham and its Neighbourhood,

Humbly sheweth,

That your petitioners having learned that a measure of general medical reform is announced by your Majesty's principal Secretary of State for the Home Department, and your petitioners believing that such a measure, on an enlarged and liberal basis, is highly necessary to the health of your Majesty's subjects, and is urgently desired by the great body of the medical profession.

Your petitioners humbly pray,

That your Majesty will be graciously pleased to defer granting any charter to any medical institution until such measure has been brought before Parliament, and received full publicity and discussion.

R. Hutchinson, M.D., Physician to General Hospital; R. Davison, Senior Surgeon to Nottingham Dispensary; Thomas Beveridge; Becket Truman; John Caunt; T. A. Burrows; Augustus Darby; Wright Allen; Henry Taylor, M.D.; Thomas Godfery; Joseph Thompson, Honorary Surgeon to Dispensary and Union Hospital; J. M. Davidson, M.D., Senior Physician to General Hospital; J. N. Thompson, Honorary Surgeon to Nottingham Dispensary; J. Massey, Honorary Surgeon to Nottingham Dispensary; Nathan Cooper; J. G. Heathcote; William L. Billings; Thomas Powel, M.R.C.S.L.; Francis Gibson; John Higginbottom; Thomas Wilson; Henry Taylor, Honorary Surgeon to Union Hospital; Booth Eddison; James Wolstenholme; W. G. Jalland; H. C. Attenburrow, Surgeon to County Gaol.

THE ANATOMY OF THE PULMONARY VEIN.

The pulmonary artery was injected with size, colored red, whilst the vein was injected with the same material, colored yellow; the lung was then laid aside, and kept moistened in a cool place for several days, with a view of softening, by approaching decomposition, the connecting cellular membrane distributed throughout the lungs. In this way the common cellular membrane beneath the pleura became so lacerable, that the pleura itself was stripped off without much difficulty, and without inflicting any breach whatever in the aeriel cellular structure of the lung it had covered. The lung then presents to the eye more or less distinct lines on its surface, which indicate the situation of what may be called the pulmonary fissures, by which is meant certain spaces occupied by common cellular membrane, descending from the surface to the interior, but without penetrating the aeriel cellular structure of the lungs, thereby dividing, more or less deeply, the surface of the organ into a number of insular portions, some of which may comprise a great number of lobules. Guided by these linear indications, we can generally, without much difficulty, with the aid of a pair of points, let into handles, or a pair of fine scissors, succeed in laying open and exposing the pulmonary fissures, at the bottom of which, merely surrounded by a loose cellular membrane, and resting on the unbroken aeriel pulmonary tissue, we discover a vessel—the pulmonary vein—alone, unaccompanied by any artery. This vessel may be distinctly traced from larger to smaller trunks towards its source, until we reach the common cellular membrane between the ultimate lobules, from the exterior of which it appears to originate; whilst, on the other hand, we may trace the vessel towards the root of the lung, still lying at the bottom of the fissure, and gradually becoming larger and larger, by the addition of branches from the surrounding textures, until it joins the large trunks at the root, to form the great pulmonary veins. A small artery is not unfrequently observed running across the pulmonary fissures, and in one instance an exceedingly narrow slip of healthy lung was found passing across like a bridge.

Thus, then, the human lung may be said to be made up essentially of a vast expanse of membrane, the interior of which, during the whole of extra-uterine life, is unceasingly exposed to the influence of atmospheric air, and upon the surface or in the substance of which are spread out the capillary ramifications of the pulmonary artery; these arterial capillaries passing thence to the exterior of the membrane to form the pulmonary vein, which throughout its whole course is found to be situated on the exterior of the aeriel cellular structure of the organ.—*Dr. Addison, Med. Chir. Transactions.*

CANCER OF THE LIVER.

Dr. Boyd narrates the case of a man, forty-nine years old, who had laboured under ascites for three months before he died, and anasarca for the last ten weeks. On examination after death, the abdomen contained a quart of a brownish-colored fluid. The concave margin of the stomach was smaller than usual; around the pyloric extremity there was a carcinomatous deposit, which extended to and surrounded the pancreas, being firmly attached to it. The liver was the largest that had ever been seen by any of the persons present; during life it formed a projection in the epigastric and right hypochondriac regions, and weighed 192 ounces; the natural structure had disappeared, and its place was occupied by numerous carcinomatous tumors, from the size of a pigeon's egg to that of a goose's egg, the interspaces filled with loose cellular tissue; the gall-bladder was empty and collapsed; carcinomatous deposits were also found in Glisson's capsule. In another case of cancerous liver, in the person of a female, fifty-one years of age, the liver contained scirrhous tubercles, and the left lobe was reduced on its under surface to a dark, pulpy state, similar to that of the anterior surface of the stomach, on which it rested. The weight of the liver was fifty-six ounces. The peritoneum was studded in several places with tubercles, varying in size, and the minor curvature of the stomach and capsule of Glisson were occupied by a scirrhous mass. The anterior surface of the stomach was gangrenous. Dr. Boyd mentions also the case of a female, aged twenty-four, whose chief complaint, in addition to the symptoms of ascites, was great tenderness on slight pressure over the abdomen, with most obstinate vomiting, resisting every attempt at relief. The sectio cadaveris showed that the liver was the organ diseased; it was greatly enlarged, weighed sixty-three ounces, and had a hard, marble-like appearance. The abdomen contained about fourteen quarts of straw-colored serum, but there were not any traces of inflammation.—*Edinburgh Med. and Surg. Journal.*

URATE OF AMMONIA AND URIC ACID.

Urine containing an excess of uric acid, whether free or combined with ammonia, is almost always of a deeper amber color than natural, sometimes even approaching a reddish brown tint; it is always acid, its action on litmus-paper being nearly in the ratio of the amount of deposit which appears on cooling. When urine is of a specific character of about 1,020, it generally contains such a quantity of uric acid, in combination with ammonia, as to let fall a copious deposit of this salt in the state of an amorphous powder, on reducing the temperature of the fluid; this phenomenon may in winter be readily observed, by merely setting the urine aside for a short time in a cool room; and in summer, by immersing the vessel containing it in a freezing mixture. This fact, indeed, affords very considerable support to Dr. Prout's opinion of the state of combination in which uric acid exists in urine; for, excepting under diseased action, I never saw uric acid deposited in this manner in a free state, but invariably in an amorphous form, combined with ammonia. On warming urine thus treated, the deposit disappears; whereas, had it consisted of uric acid, it would have been unaffected, as when once this acid is separated by the action of any precipitant from urine, it does not disappear on heating the fluid. An excess of urea is not very unfrequently met with in urine containing an unusually large proportion of uric acid, but its appearance is by no means

constant. The urate of ammonia exists, in the great majority of cases, in the pulverulent amorphous state, and not in acicular crystals, as described by M. Vigla. If the urate, when deposited, assume the white, fawn, or brick-red color, there is a deficient state of the cutaneous functions; if the deposit presents various streaks of pink or crimson, there is always more or less evidence of functional or organic derangement of the liver, spleen, or other organs influenced by the portal circulation.

When uric acid is artificially separated by the addition of another acid, the crystals vary in color with the amount of chemical action exerted on the coloring matter of the urine by the acid employed; hence the lightest-colored crystals are obtained when acetic and phosphoric acids are used; whilst nitric and hydrochloric acids generally cause the deposition of deeply-tinted crystals, which present, under the microscope, evidence of a somewhat complex structure. Uric acid is found in a free state much less frequently than in the form of urate of ammonia, and wherever it exists the urine is always acid, often considerably more so than in any other condition of that fluid. The minute crystals of uric acid, thrown down by the addition of another acid, contain considerable traces of coloring matter, and vary in hue from pale yellow to brown or red, and, in some few cases, to positive black, appearing, when dry, like so many polished grains of gunpowder, powerfully reflecting light. It is found more generally of a yellow, orange red, or brick-dust color; never, however, presenting the beautiful carmine tints occasionally possessed by the urate of ammonia. It is sometimes met with isolated and unmixed with any amorphous deposits, but more generally is found in company with the urate of ammonia, and by repose two distinct layers are formed, the lower consisting of uric acid, often in crystals sufficiently large to be distinguished by the naked eye, and above this a dense layer of amorphous urate.—*Dr. Bird, Guy's Hospital Reports.*

HÆMORRHAGIC DIATHESIS.

Dr. Allan, of Haslam Hospital, communicates the particulars of two cases of hæmorrhagic diathesis, occurring in the persons of uncle and nephew. He was called on the 18th of August, 1840, to visit a fine boy, five years old, who had slightly abraded the left wrist a short time previously—so slightly, indeed, that Dr. Allan would not have noticed it, had he not been informed that a brother of his patient had previously died of hæmorrhage from as slight a cause. The physical appearances were the same in both children. Dr. Allan describes his patient as being a singularly beautiful boy, with an unusual blush on the skin, auburn hair, and bright hazel eyes. In the case under notice Dr. Allan had recourse to pressure, the repeated application of the actual cautery, and the nitrate of silver, of alum, acetic acid, oil of turpentine, green oak bark, spider's web, &c., but all unavailingly; the poor little fellow died on the seventh day. The injury which proved fatal was quite superficial. He had been vaccinated when ten months old, without any unusual result from the operation, and the other child that died had been cut deeply with a knife, and the blood stopped in the usual manner. The father told Dr. Allan that the greater danger was from superficial injuries, as proved to be the case with both the brothers. The other children were all fair-haired with blue eyes, and none of them have the hæmorrhagic diathesis.

Dr. Allan's attention was afterwards called to the uncle, aged eighteen, who presented physical characteristics similar to his nephew, and who had been repeatedly at death's door from injuries. He had lost an eye, when a child, by an arrow, and the hæmorrhage had continued several days. The slightest pressure caused extensive black bruises. He suffered from several attacks of bleeding from the nose and gums, with superficial collections of bloody serum under the cuticle, from pressure and slight bruises. He found most relief from the sulphate of magnesia, which he had been in the habit of taking once a week for years. When Dr. Allan saw him next, he was laboring under symptoms of sea-scurvy, with swollen and discolored joints, &c., and died shortly after. Some of his mother's relatives had been subject to hæmorrhage. — *London and Edinburgh Monthly Medical Journal.*

ABSORPTION OF CERTAIN MINERAL AND VEGETABLE ACIDS.

M. Orfila has instituted a series of experiments on animals, with the view to determine the medico-legal question of their absorption into the system. The acids experimented with were the sulphuric, nitric, hydrochloric, oxalic, and acetic acids. The question is one of great importance in a medico-legal point of view, because, in case of absorption taking place, the chemist must carry his researches into organs situate at a distance from the stomach, if he should not discover the poison in the digestive canal, and if absorption does not take place, he must confine his experiments to the matters vomited, to those that are found in the stomach and intestines, and to their tissues.

The result has been, that M. Orfila has satisfied himself that traces of these acids can be discovered in the urine of persons poisoned, but not in the liver or spleen. Thus, in cases of ingestion of nitric or oxalic acid, if owing to long-continued vomiting or purging, or to the action of antidotes, no traces are discoverable in the primæ viæ, the chemist must proceed further to analyse the contents of the bladder and other organs, although the acids may have been very concentrated when taken. This experiment alone is not to be accepted as full proof of the ingestion of a poison, but simply as corroborative evidence, as the urine may yield indications of one of these poisons, when the source has been articles of food, containing an oxalate, or medicine containing nitre. The same remark applies more strongly to poisoning by sulphuric or hydrochloric acid, because, although the urine contains a larger quantity of chlorurets and sulphates, when these poisons have been administered, than is usual, still it may do so naturally after the exhibition of certain kinds of food; the experiment, then, in this instance can be regarded only as corroborative evidence, by comparing the quantity of salts yielded by the urine of the person supposed to have been poisoned, with that contained in the urine of several healthy persons. The nature of the food taken for some little time previously must necessarily be ascertained by the medical jurist; whether it was much salted, &c. If either of these four acids should be clearly discovered in the liver, spleen, or other

organs, more or less distant from the stomach in a free state, or a soluble nitrate be found, it might be held as incontestable proof that the acid had been absorbed, after either its introduction into the stomach or rectum, or its external application, since they are never met with in these viscera in a healthy state. If the presence of the acid should coincide with symptoms of poisoning, and the lesions of tissue usually found under such circumstances, there cannot be any doubt of the administration of the poison. The indications of acetic acid were very doubtful.—*Journal de Chimie Médicale.*

TERMINATIONS OF PERITONITIS.

The report of M. Chomel's clinique at the Hôtel-Dieu contains a brief notice of eight cases of peritonitis, one of which is said to have been very interesting, on account of the complications which attended it. Another occurred in the person of a woman, who was delivered at the eighth month of pregnancy, and was afterwards seized with peritonitis, which terminated fatally in forty-two hours. The sectio cadaveris showed clear indications of intense metro-peritonitis. There were several cases of recovery, the disease terminating in some by resolution, and in others by suppuration. In the latter cases the pus sometimes collected near the vagina or rectum, where its presence could be distinguished by the finger, and occasionally it formed nearer the abdominal parietes—for instance, in the iliac fossa, whence it made its way externally, adhesions taking place between the neighbouring parts. In some cases it made itself a passage through the rectum, in others into the bladder, and was evacuated through the urethra. When it could not show itself externally, marasmus came on, followed by death. Cases are sometimes seen where the pus is evacuated at intervals, as it were periodically; for example, every eight or ten months, the health of the patient being perfectly re-established during the intermediate period. M. Chomel mentions several cases of this kind; for instance, he has seen a woman pass five or six spoonsful of pus by the urethra every six or seven months; she suffers a little at the time, but soon gets over it, and is as well as ever. Another patient passes pus and gas together every time she makes water.

Four cases of post puerperal metritis were admitted, and successfully treated. M. Chomel does not consider this complaint to depend on excessive coition as often as it is supposed; he attributes it to the sudden suppression of the catamenia, and more especially to abortion, caused by improper interference.—*Gazette des Hôpitaux.*

CHOICE OF HERNIA TRUSSES.

For a simple inguinal hernia the best spring is the English spring, which embraces the body on the sound side. If the hernia is oblique and easily retained, the movable pad should be selected; but where the reverse is the case, a fixed pad is preferable. There should be always a decided interval between the extremity of the spring and the internal surface of the pad, whether it be procured by an intermediate pad or only by augmenting the thickness of the compress itself. It is on the form of the compress that the retention of a rupture principally depends. For oblique hernia the pad should cover the whole canal, making pressure, according to circumstances, either directly upon the centre of the canal, or with an inclination towards the internal or external ring. In direct hernia the preference should be given to the triangular pad (*à bec de corbin*). In very thin subjects, the spine of whose pubes is very prominent, and unable to sustain the pressure of the ordinary pad, that filled with air is a resource. The leather strap, and that which passes beneath the thigh, should never be too tight. The rupture ought to be retained by the power of the spring, of which the other parts of the truss are only auxiliaries. Every truss that allows the escape of the hernia does more harm than good. If a truss hurt or incommode the patient, it is bad; at the same time it must be admitted that there are some herniæ which are extremely difficult to retain, and which therefore form an exception to the above rule, great restraint being the unavoidable result of the application of the necessary apparatus.—*Malgaigne on Hernia.*

ACTION OF STEAM UPON CALOMEL.

M. Righini states, in a communication published in the "Journal de Chimie Medicale," that he conveyed steam through a glass tube containing pure pulverised calomel, the steam passing into a glass retort surrounded with ice. Half an hour afterwards, part of the calomel was observed to have been volatilised with the steam, and to have passed into the receiver in a state of minute division. The steam, reduced to the state of water, was then treated with the ioduret of potassium and sodium, when a vermilion-red deposit was thrown down; a red precipitate approaching to yellowish ensued on the addition of lime-water, and by means of the bicarbonate of potass a red precipitate was obtained by the iodurets, and a white one by ammonia. The alcoholic tincture of iodine did not cause any change, except a slight deposit of iodine. These re-agents clearly showed the presence of the deuto-chloride of mercury. If we consider steam as a source of accumulated electric fluid, the probability is that it causes the decomposition of the calomel at the very moment of its preparation.

THE BASEMENT MEMBRANE.

It had been ascertained by Henle, that the wall of an uriniferous tube is composed of two elements—a transparent membrane and an epithelial covering; to Mr. Bowman is due the merit of having shown that these elementary parts exist wherever true mucous membrane is found, and that skin is similarly compounded.

The primary and most essential of these elements is the transparent membrane. It affords perhaps the simplest and most beautiful example of a membranous expansion which can be met with in the body. It forms the basis on which the epithelial element is deposited; and to it, the mucous membrane owes whatever cohesive power, strength, or other physical property it possesses. Hence, Mr. Bowman has given it the appropriate name of *basement membrane*. It is homogeneous, structureless, and perfectly transparent; the highest powers of the microscope cannot detect in it any definite arrangement of particles. The transparent tube that envelops the fleshy elements of the primitive fasciculus of voluntary muscle, presents precisely the same character, as does the wall of the nerve tubule, the posterior layer of the cornea, and the capsule of the crystalline lens. The basement membrane does not admit vessels into its texture

They ramify on its deep or parenchymal surface, and are supported by the submucous cellular tissue, or by a soft cystoblastema, which seems to be derived from recently effused liquor sanguinis, and from which, probably, the basement membrane and the epithelium have their nutrition and growth.—*Dr. Todd, Medical Gazette.*

COMPOSITION OF VEGETABLE FIBRINE, ALBUMEN, AND CASEINE.

MM. Scherer and Jonas have shown that these three principles present the same composition as the fibrine, albumen, and caseine extracted from animals; consequently, they are isometric with them. The results of their analysis are, vegetable fibrine, carbon, 53.83; nitrogen, 15.59; hydrogen, 7.02; oxygen, 23.56. Animal fibrine :—carbon, 54.45 ; nitrogen, 15.76 ; hydrogen, 7.06 ; oxygen, 22.71. Vegetable albumen :—carbon, 54.74; nitrogen, 15.85 ; hydrogen, 7.77 ; oxygen, 21.64. Animal albumen :—carbon, 55.09 ; nitrogen, 15.92 ; hydrogen, 7.07 ; oxygen, 22.06. Vegetable caseine:—carbon, 54.13 ; nitrogen, 15.67 ; hydrogen, 7.15; oxygen, 23.03. Animal caseine :—carbon, 54.50 ; nitrogen, 15.67 ; hydrogen, 6.90 ; oxygen, 22.92.—*Journal de Liebig.*

CHLORIDE OF ZINC USED AS A CAUSTIC.

The " Dublin Journal of Medical Sciences " contains an account of three cases—two of cancer, and one of indolent ulcer—treated at the county Louth Infirmary, by Dr. Brunaker, in which the chloride of zinc was used as an escharotic, according to M. Conquoin's plan, with decided benefit. One part by weight of the chloride, and two parts of flour, were mixed together by adding a sufficient quantity of water to form them into a paste ; this was spread over the entire surface of the diseased part, care being taken to prevent its coming into contact with the healthy structures in the neighbourhood ; a piece of dry lint was then laid on, and lastly a piece of thin bladder, moistened, was placed over all, and secured with strips of adhesive plaster. In each of the cases the application was productive of much pain, lasting from twenty-four to forty-eight hours ; in two of the cases the slough separated on the fifth day ; in the other on the sixth, leaving a healthy ulcer which cicatrised rapidly. The action of the chloride in both the cases of cancer was confined to the morbid structure, and destroyed it to its entire extent.

ARSENIC.

Professor Gianelli states that the blood, urine, and lungs of animals poisoned by arsenic, whether taken from the living subject, or from bodies recently dead, or from such as have been buried several days, or, some time after the poisoning, from those that have been cured, act as a decided poison on birds. The brain and spinal marrow do not produce any such effects. He has not been able to ascertain that the blood of animals poisoned with other substances, is productive of equally fatal consequences. Professor Gianelli considers that this fact may be made available in detecting cases of poisoning by arsenic.—*Journal de Chimie Médicale.*

PREPARATION OF PURE BENZOIC ACID.

M. Janssens, a chemist at Malines, proposes the following plan for procuring pure and inodorous benzoic acid of a brilliant white color, and uninfluenced by exposure to the atmosphere. Take one part, by weight, of yellow and empyreumatic benzoic acid, and mix it with eight parts of distilled water, then add an excess of liquid ammonia, and treat the resulting solution of benzoate of ammonia with ivory black, previously washed with water and a little hydrochloric acid. Filter, and then decomposing the hydrochloric solution, the benzoic acid will be seen to deposit in the form of beautiful white flakes. These flakes thrown upon a filter, and washed several times with distilled water, are set aside to drain, after which they are to be dissolved in a sufficient quantity of alcohol. The alcoholic solution is next to be filtered, and then diluted with distilled water, in order to precipitate the benzoic acid, which is but little soluble in that liquid; by these means the essential oil, to which the flowers of Benjamin owe their peculiar odor, remains dissolved in the spirit. All that remains to be done is to crystallise or sublime the acid, in order to have it in a state of purity and beauty.—*Archives de Médecine Belge.*

FATAL HÆMOPTYSIS IN CHILDREN.

Dr. Cathcart Lees has published three cases of sudden death occurring in children of the respective ages of six years, three years, and nine months, from the rupture of a branch of the pulmonary artery opening into a cavity in the lung, and causing fatal hæmorrhage. In each case the vessel which furnished the blood was clearly traced, and the part where the rupture took place fully made out. The rarity of these cases is proved by the fact that Dr. Stokes does not make any mention of any such, and Dr. Hodgkin, in his lectures on pathology, says, " I firmly believe that, with the exception of some rare cases, in which the production of a tuberculous or other cavity may have been attended with the division of an open vessel, a case very inconsistent with the ordinary progress of such cavities (and except in the equally rare cases of wounded lung), it is probable that no one has even been able to detect the orifice, or even the vessel from which the blood has escaped."—*Dublin Medical Journal.*

BENZOIC ACID.

The experiments of Mr. Ure with respect to the change of uric acid into hippuric, under the influence of benzoic acid, or of a soluble benzoate, have been repeated by Leroy d' Etiolles, De Bouys, and Rayer with success. The principle has been applied in the treatment of disease with advantage, the deposition of uric acid ceasing while the patient was taking benzoic acid. The subject being one of the utmost importance in a therapeutical point of view, for the reasons stated lately, M. Bouchardat, the principal pharmacien at the Hôtel-Dieu, repeated the experiment on a patient in the ward Saint Jeanne, laboring under acute rheumatism, the urine depositing uric acid freely, but with a different result. He gave him a scruple of benzoic acid in eau sucrée, and examined the urine the next day ; although very high colored, there was not any spontaneous deposit ; it became very turbid on the addition of a tenth part of its volume of hydrochloric acid, and uric acid, not hippuric, was precipitated. The same experiment, repeated three days consecutively, always gave the same results. Here, although the change prognosticated by Mr. Ure did not take place, yet the urine ceased to furnish a spontaneous precipitate of uric acid as heretofore.—*Journ. des Connaiss. Med.*

A REWARD FOR GRATUITOUS MEDICAL SERVICES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I have some time past suspected that medical men are much too liberal in the readiness, perhaps I might say the eagerness, with which they *give* their professional assistance to the public, and that, consequently, there is not only an absence of gratitude towards them, but further, their services are so undervalued, that it is considered quite a favor conferred to accept them. I give you the following case in illustration:—

There is in this town a Magdalen asylum, regulated by the usual rules. It is small, and the duties of the medical officer, although certainly not heavy, it will be understood are neither agreeable nor instructive. The clergyman who visits has a salary; of course, all the officers are paid, *except the medical.* The druggist's bill last year was £12 19s.

About sixteen years ago the then committee of management requested me to become one of the medical attendants; I assented, and have discharged nearly the whole of the duties from that time. Two years ago I took a partner—a married gentleman—and as the rules of the institution would not otherwise permit his visiting the house, I requested his name might be joined with mine as one of the surgeons to the establishment. It was observed in the committee that, "if Mr. Wilton was tired of serving them, there were older residents than his partner who *had claims on them.* Such situations were of great value to medical men; how eagerly they always sought them!" In short, I asked too great a favor for my sixteen years' services; the appointment is worse than valueless, but my partner would not be allowed to share it, because some members of the committee thought so good a thing must be given to their own professional friends. I resigned, and a circular has been sent to the married medical men of this town, calling on them to offer their services, as the committee intend to elect two surgeons, "Mr. Wilton having resigned, and Mr. Cother's professional engagements preventing his attendance."

I am, Gentlemen,

Your obedient servant,

JOHN W. WILTON.

Senior Surgeon to the Gloucester Infirmary.

Gloucester, June 30, 1842.

CONCOURS.

The concours for the professorship of clinical surgery, vacant by the death of M. Sanson, has terminated in the election of M. A. Berard.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, July 8, 1842.

James Hunt, Edgar Cockell, Lionel Roberts, Octavius Frederick Heritage, James Moir, John Moore, Charles Hooper, Edmund Ormond Lyne, John Frederick Nicholls, William Davies, Frederick Morrison Clifford, George Brown Clark, Thomas Parr, James Cornwall.

APOTHECARIES' HALL.

Licentiates admitted Thursday, July 7, 1842.

P. Milner, Wakefield; E. Moore, London; D. H. Bell, Haynes, Copford, Essex; R. Davis, Cavan, Ireland; T. Smith, Patrington; G. J. Hilbers, Theydon Bois, Essex; J. W. Metcalfe, Canterbury.

BOOKS RECEIVED.

The Climate of South Devon, and its Influence on Health. By Thomas Shapter, M. D. London: Churchill, 1842. 8vo. pp. 258.

The Simple Treatment of Disease deduced from the Methods of Expectancy and Revulsion. By James M. Gulley, M.D. London: Churchill, 1842.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, *Strand, London.*

TERMS.

One Year	£1 10 0
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TO CORRESPONDENTS.

The letter of *Mr. Cartwright* arrived too late for insertion this week.

Mr. Estlin's paper on Strabismus, and *Mr. Walker's* case of Artificial Pupil next week.

In answer to several correspondents, who have inquired about back numbers, we have to reply that Nos. 1 to 27 are out of print. A few copies of the *new series* remain, and may be obtained by gentlemen, who desire to complete their sets, through any bookseller.

A. S.—The Irish Medical Charities' Bill will be introduced by Lord Eliot in a few days, but we cannot say how far it may be modified.

A Subscriber should apply to Dr. Hastings or Mr. Sheppard relative to the 10th volume of the Transactions. We have no authority to order a copy for him.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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REPORT

OF THE

RESULT OF THE OPERATION

FOR THE

CURE OF STRABISMUS IN A HUNDRED PATIENTS.

By J. B. Estlin, F.L.S.,

Surgeon to the Dispensary for the Cure of Complaints in the Eyes, Bristol.

[Read at the Annual Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, June 30, 1842.]

A considerable diversity of opinion appears to exist in various places as to the success of the new operation for the removal of strabismus; and I have heard it to be the opinion of one of the most eminent oculists in London, that the defect will, only for a limited time, be remedied by the division of the muscles moving the eye. I have, therefore, been induced to review a certain number of the cases which have fallen under my notice, for the purpose of determining the amount of success which has been effected, and of forming some judgment as to its permanency, from the time which has already elapsed since the adoption of the method of cure. This I have found no difficulty in doing in a large proportion of persons operated upon, having kept regular notes of their cases, and many of the patients being continually under my observation; and it appeared to me that a condensed report of the result of the operation in a hundred cases might not be an unfit communication for the annual meeting of our district branch of the Provincial Medical and Surgical Association.

It would lead me beyond the limit of the time allowed for reading this memoir to enter upon the various modes of operating in separating the recti muscles of the eye from their insertion into the globe; it will only be necessary for me to state the operation which, after the trial of others, I have usually practised in the cases that will be referred to. It is essentially that recommended by Mr. P. Bennett Lucas, of London. A perpendicular slit (supposing the patient to be in a sitting position) is made through the conjunctiva, about half an inch distant from the cornea; a small blunt hook is introduced through this conjunctival aperture beneath the muscle, and its union with the globe separated by the same scissors which have been used for cutting the conjunctiva. The only instruments I employ are, a pair of small round-pointed forceps, for taking up the conjunctiva, Lucas's blunt hook, and a strong pair of scissors, either straight or angular, for making the incisions. The hook recommended to be inserted into the sclerotic coat, for the purpose of fixing the eye, I have never ventured to use; it appears to me to be a dangerous instrument with an unsteady patient, a coarse and unnecessary one for a firm patient, and one which is discreditable to the surgery of the present day. Excepting in some very unusual circumstances, or by way of experiment, I do not employ specula, or instrumental methods of separating, and holding the lids, trusting them entirely to the fingers of an assistant. An experienced assistant is certainly desirable, but I have repeatedly operated with no other aid than that afforded me by a female servant. I cannot believe that surgeons much accustomed to the ordinary operations upon the eyes will, in general, be found to have recourse to instruments for steadying the ball and lids while dividing the muscles for the cure of strabismus; such instruments greatly add to the pain of the patient, and in this way, I think, often tend to render him irritable and unsteady during the most difficult part of the operation.

The after treatment I have adopted has been, to bind up the eye immediately after the operation, but to remove the bandage in a few hours, without replacing it; to insist upon the patient's going to bed, and remaining there for at least twenty-four hours; the free application of warm water to the eye every six or eight hours; low living for a day or two, and the avoidance of occupation so long as any uneasiness of the organ is occasioned by it. Under this plan I have never seen any unpleasant symptoms follow, and have scarcely ever had occasion to employ any remedies. The patients have usually recovered in about a fortnight; sometimes a small piece of loose fungus has required to be snipped off with scissors, but I have not found this to occur more frequently than once in eight or ten cases.

In reference to the point of operating upon one or both eyes, I would premise that I think a want of clear ideas exists as to what is spoken of as squinting with one or with both eyes, or, as it is termed, a single or double squint. An eye which is turned away from an object upon which the other eye is fixed, is said to squint; but this peculiarity scarcely ever exists in one eye only; the condition of the sight may occasion one eye to be preferred for seeing in general; but when that eye which is alone supposed to squint is fixed upon any object, it is very rarely the case that a similar degree of obliquity is not seen to exist in the one which ordinarily does not squint.

In the majority of cases of strabismus, patients see much better with one eye than with the other, and they consequently use only, or principally, the better eye. In proportion as the power of seeing with each eye is equal, the eyes are alternately used, and the person is then said to have a double squint. Where each retina is equally healthy, the change of position of the eyes is so frequent, that a decidedly double squint is the consequence. In some people with strabismus, the same peculiarity exists in the optical adjustments of the eyes which is observable in many who do not squint—viz., the focal distance of distinct

vision is very different, so that one eye is always used for near objects, and the other for distant ones; where such an inequality exists in a person with strabismus, the perpetual change of the eye that is used occasions also a remarkable example of double squinting. In cases of amaurosis of one eye, or when adhesions limit the movements of an eye, or when it can at no time have its axis properly directed to an object, the healthy eye will never squint; but to such a case, almost exclusively, can the expression of a single squint be correctly limited. If, however, it be understood that by single or double squint, the more rare or more frequent use of both eyes for looking at objects is implied, no confusion of ideas will result; but the attempt to draw a line in every case between squinting with one eye only, or with both, will occasion perplexity in the narration of cases.

The rule I have usually adopted has been, to operate first upon the eye which squinted most, and to be regulated by the progress of the operated eye, and the direction ordinarily assumed by the other, as to an operation upon the second eye. Often an interval of many weeks may pass with advantage before the second eye is operated upon; and if the eventual success of the operation were alone to be consulted, I should generally pursue this plan of waiting, as I am often able to do in private practice; the necessity, however, of speedily accomplishing the cure, especially among the poorer classes, requires prompter proceeding; and in all patients where I see the operated eye resuming its accustomed mal-position, or the other looking obliquely within a week of the first operation, I never hesitate to recommend the division of the muscle of the eye not yet operated upon.

In a few instances, and usually for the patient's convenience, I have operated upon both eyes at one sitting; as far as the completeness of the cure is concerned, I am not prepared to say that any advantage or disadvantage is the result of this mode of proceeding. In the removal of a personal deformity, it is far more difficult to agree upon some standard by which the success of the measures employed may be tested, than is the case in the more ordinary achievements of our art. With respect to the latter, if the medical attendant and his patient are perfectly satisfied, no farther proof of success is demanded; but in the other circumstance, the public take upon themselves the right of judging, and the contentment of the patient and his surgeon is admitted as but slight evidence of a successful event. And most unreasonable, as it appears to me, are the criticisms which are continually made upon the results of the operation for the removal of squinting. With some this valuable improvement in the art of surgery is thought of little moment, if it fails to produce perfect symmetry in an eye which has been distorted for many years, and in which the figure of the globe and the aperture of the eyelids are sometimes become deranged by the morbid direction of the organ. It is of little importance for the surgeon to witness the beautiful effect of a most scientific application of his art to the removal of a distressing deformity, or for the patient, relieved from a defect which, through life, has been a source of daily annoyance to him, to feel (as pathetically expressed in a letter of thanks to me by an uneducated young woman from Wales, who had been cured by the operation) that he "can now meet the gaze of a stranger without fearing to be an object of pity or of sport." A degree of perfection is expected as the result of this operation, which is not looked for in others; and any little irregularity in the movements of the eyes is charged to the amount of a defective operation, with as much justice as the extraction of a cataract would be undervalued because the sight given was of an imperfect description, and the inconvenience of wearing spectacles imposed.

In many of the cases upon which I am reporting, it would require minute investigation to detect the slightest remains of imperfection in the eyes, especially in those patients where both eyes have been operated on. Such results I have, upon the whole, thought it most correct and intelligible to designate by the terms "perfect," or "very satisfactory;" and in those placed under the head of "satisfactory," no deformity remains sufficient to attract the notice of casual observers. Some of these satisfactory cases would be rendered more perfect by the division of the muscle of the other eye; but where the want of parallelism between the two eyes has been so slight as scarcely to be noticeable, I have not advised any farther measures, and sometimes, where I have recommended them, the patient has been so well satisfied with his improvement, both in appearance and in the power of using his eyes, as not to consent to any more treatment. Cases of this nature are often regarded, by those who do not know all the facts, as evidence of the inefficiency of the operation.

In bringing these results before the society, my object has not been to make a showy statement, selecting good cases, and keeping unfavorable ones out of view. I have thought the most satisfactory mode would be to make no selection at all, but to give a faithful report of the first hundred cases that came under my hands, regardless of the less bright aspect of the report, which want of practice in the operation, and want of selection in the cases suitable for it, would naturally produce at the commencement of the new plan of treatment. I shall be quite contented if you think the operation has been not less successful under my hands than in those of my professional brethren.

Of the 100 patients, 39 were males, 61 females; their ages were as follow:—

From 5½ years	to	10	13*
,, 10	,,	15	17
,, 15	,,	20	23
,, 20	,,	30	26
,, 30	,,	40	10
,, 40	,,	50	5
,, 50	,,	60	5
,, 62	,,	—	1
			100

Of these, 92 were affected with convergent, or internal strabismus, and only 8 with divergent, or external squint.

In 39 patients the left eye was the subject of operation; in 32 the right; and in 29 both were operated upon.

* I have uniformly declined performing the operation upon children so young as not to be anxiously desirous of submitting to it.

In 5 of this number it was necessary to repeat the operation a second time upon the same eye, and one of the patients, a young gentleman of fifteen years of age, required to have both eyes operated upon twice.

The following is a general statement of the results at a period of time varying from 6 to 14 months after the operation:—

Of the patients with internal squint, the recovery was—

	Cases.
Perfect or very satisfactory in . .	44
Satisfactory	21
Very satisfactory a week or two after, but no later report . . .	9
Improved but requiring an operation on the other eye	7
Squint returned, requiring an operation on the other eye	4
Improved, but the cases unfavorable	5
Some degree of external strabismus following the operation for internal	1

In the 8 cases of external squint, the event was—

	Cases.
Perfect in	1
Much improved	3
Slightly improved	2
Not improved	2

Or, to state the total results more concisely, there were of cases—

Perfect or satisfactory	65
Satisfactory, but no late report . .	9
Improved, but requiring an operation on the second eye	7
Not improved, but requiring an operation on the second eye . .	4
Improved, but unfavorable cases .	5
Much improved	5
Slightly improved	3
No improvement	2
	100

As 11 of these cases must be considered unfinished ones (or, supposing the patients were willing to submit to another operation, as "still under treatment"), and as 9 others have not been reported upon beyond a few days after the operation, it is of course impossible to make a complete return in all the hundred cases; of the 9 last mentioned, I am satisfied from the notes that were taken, that at least 7 of them would prove very satisfactory, and I feel waranted in stating that, notwithstanding 5 of the cases were unfavorable ones for the operation, not more than 5 out of the 100 can be considered as failures, and these consist chiefly of patients with external strabismus.*

There are many points of great interest in reference to the performance of the operation, and its immediate and remoter results, which I must not venture to enter upon; I may, however, be allowed to say, that I think I have derived advantage in the event of the cases, by making no attempt to *hurry* the operation—a proceeding which is scarcely avoidable, or justifiable when the patient is kept in a state of suffering by the application of instruments to prevent the movement of the globe and lids. I first separate the muscle from its insertion, and then carefully examine the movements of the eye; if the power of inversion in convergent strabismus be still so great as to allow of the cornea being brought to the inner canthus, I examine with the hook if any muscular fibres remain unseparated, and should more be found, I then divide a little of the fascia upwards, and sometimes it is necessary to do this till the section approaches very near to the perpendicular diameter of the eye. I am not satisfied until the eye is so far disabled as to be incapable of turning in sufficiently to conceal the white, and it is remarkable how the abductor muscle acts in a few days (sometimes in a few hours) in bringing to the centre an eye that has been left more inverted than was satisfactory.

A large and prominent eye I usually find to require less division of the tendon than a small and sunken one; and with such I proceed more cautiously in separating parts.

The section of the tendon in some eyes is followed by an immediate increase in the prominence of the globe, the oblique muscles, probably, bringing the ball forward in consequence of the removal of the tension occasioned by the tendinous fascia; I am unable to say why this occurs more in some eyes than in others; it certainly occasions a dissight; but I think the unusual fulness of the globe diminishes in time. It is, however, desirable to examine the general aspect of the eyes before the operation, as some deformity will occasionally be discovered besides the squint, which, when no other defect remains, will be put down to the operation. I have observed an eye much fuller than the other before any operation has been performed.

Whatever may be the opinion of those who have not had the opportunity, or taken the trouble, to watch cases in which the muscle has been divided for the cure of strabismus, as to the liability of the defect to recur, I have only to say that, as far my observation has gone, the tendency is to improve. I do not remember a case in which any change for the worse has taken place after a month had elapsed from the operation. In many cases where I have expected it would be necessary to divide the muscle of the second eye, so regular an improvement has gone on during the course of some months as to indispose me to recommend the measure. In two of the preceding cases reported as unfinished, the squint with both eyes was so bad that I attempted to operate on the second eye a week or two after the first had been done; but the patients, little girls, were so unsteady, that I was obliged to desist; and now, after an interval of eight months in one case and of ten in the other, the eyes are so much more parallel that I think it questionable whether the children or their friends will ever desire to have anything more done.

The effect of the division of the muscles upon the visual powers, where they have been previously impaired, has been various; in eyes considerably amaurotic no improvement has taken place; in others (in such, probably, where want of use has been the prin-

* Dr. F. A. Ammon, physician to the King of Saxony, in a letter to Dieffenbach, gives the result of 72 operations performed by himself and three other surgeons of Dresden, of which he says 45 had an entirely happy result; 13 only partial success, and 14 have failed. Out of the 72 cases, 9 were cases of divergent strabismus.

cipal cause of the imperfection) much improvement has occurred; some patients have been able to read with the operated eye who could not do so before. Without any especial reference to the comparative powers of the two eyes, the remark of the patients has been very general that they can use their eyes afterwards with greater freedom and comfort.

The experience of others, I believe, accords with my own, as to the imperfect adaptation of this operation, as now performed, to the cure of external strabismus; happily, the proportion of these cases to the more curable ones is small. Dieffenbach maintains that paralysis of the rectus internus always attends external strabismus—an assertion I cannot think correct, as I have observed such eyes capable of being turned in by a voluntary effort of the internal rectus. He has occasionally, after separating the rectus externus, passed a small ligature through the conjunctiva, between the cornea and internal canthus of the operated eye, drawn it towards the corner so as to produce an artificial internal squint, and secured the thread to the bridge of the nose by adhesive plaster. I am unable to procure satisfactory information as to his success in cases of external strabismus.

I must not trespass upon the time of the meeting by entering upon the very interesting topic of the moral effect of strabismus upon those who have experienced this personal defect. Until its removal by the operation so scientifically devised for the purpose, I had no idea of the extent in which this deformity had exercised a painful influence upon the minds of those who had been the subject of it. The comfort of numbers, through a long course of years, has been daily embittered by it, and many a promising character has been permanently stamped with a distressing and morbid sensitiveness, from a dissight which is known to attract notice, but which often subjects the sufferer to much less observation than his exaggerating imagination leads him to suppose. Had the triumph in surgery, which will perpetuate and shed a lustre upon the name of Dieffenbach, been far less perfect in its results than it is at present (or than it will probably become after more experience), it would still have been gratefully hailed as a precious boon by those sufferers who alone can fully appreciate its value.

CASE OF CONICAL CORNEA, TREATED BY FORMATION OF ARTIFICIAL PUPIL AND SUBSEQUENT EXTRACTION OF THE LENS.

By John Walker, Esq., Manchester.

Joshua Bentley, aged forty-seven, from Lees, near Oldham, was admitted August 21, 1841, into the Manchester Eye Hospital. He states that he had always enjoyed excellent health, with the exception of a severe attack of cholera eight years since. Seven years ago he had an attack of inflammation of both eyes, since which his vision has been somewhat impaired, although he was able to follow his usual employment as a cotton-spinner, until February last, when he ceased work, his sight being no longer such as to enable him to continue it. He can find his way about pretty well, and can read a moderate sized type when held at two inches distance from his eyes. With the right eye, when the lids are nearly closed, as in drawing them together by pressure at the external canthus, he can read at a much greater distance, but not so with the left. When looking at a lighted candle or other luminous body, it appears to be multiplied about ten or twelve times, but no chromatic aberration is noticed. The multiplication of images is not observed in looking at ordinary objects, and when the eyelids are nearly closed, in the manner before mentioned, luminous objects appear single.

On looking at his eyes, there is a peculiar sparkling appearance at the centre of the cornea, which is observed to be pointed in the shape of a cone, and decidedly opaque, the opacity being most extensive in the left. In other respects the eyes appear perfectly healthy. He has for some time past been under the care of a surgeon, who has applied various remedies without benefit. Concave glasses were not found to improve vision in the least degree, nor did looking through a small hole in a card make any change. He was ordered to use a solution of the extract of belladonna and to take a purgative occasionally.

Sept. 25. He has used the remedies prescribed without experiencing any change in the condition of his eyes. As there was no probability of his being benefited by any medicinal or topical applications, he was advised to submit to some operative proceedings. The patient having assented, the operation proposed to be first tried was that of removing a portion of the iris, so as to bring the pupil to the bottom of the anterior chamber, and away from the opaque and projecting portion of the cornea. This it was agreed to do in one eye first, and, as the left was the most affected, it was selected for the experiment. A puncture was accordingly made with an extraction-knife at the lower border of the cornea, close to its junction with the sclerotica, sufficient to admit of the introduction of a hook or small forceps. This was followed by the immediate discharge of the aqueous humor and the protrusion of a portion of the iris. The prolapsed iris was then laid hold of with the forceps, drawn out of the wound, and snipped off with scissors. The pupil was now observed to extend close to the inferior margin of the cornea. The eyelids were then closed, and secured with plaster dressings.

29. Inflammatory action has been very slight. The operation has been perfectly successful; the pupil is clear, and extends to the bottom of the anterior chamber, presenting the exact appearance observed in the congenital defect termed *coloboma iridis*. Vision, he thinks, is slightly improved.

Oct. 16. No particular change is observable in the appearance of the eye since last report. The slight irritation which followed the first operation has totally subsided; the improvement of vision is found to be but trifling; he can now read small type at the distance of three inches, whereas before he could only do so at that of two, and there is a proportionate improvement in viewing other objects. This limited amendment being far from satisfactory to the patient, he was desirous that a further attempt to improve the vision of this eye should be made. The removal of the crystalline lens was accordingly resolved on, and extraction was the operation which appeared the most likely to meet the exigencies of the case. It being

important to preserve the transparency of the inferior portion of the cornea, opposite the newly-formed pupil, Mr. Walker thought it most advisable to resort to the upper section. The patient was accordingly placed on a sofa with his head sufficiently raised, the operator being seated behind. The lids being properly secured, a double-edged extraction-knife was pushed across the anterior chamber, the point entering at the outer angle and being brought out at the opposite side, cutting upwards around the superior margin of the cornea and admitting of the immediate discharge of the aqueous humor. An interval of about two minutes having elapsed, the lids were then separated, the curette introduced beneath the flap of the cornea, and the capsule gently lacerated, when the lens, which was perfectly transparent but having a slight yellowish tint, was immediately discharged, without any pressure being required, and without any escape of vitreous humor. The flap being properly adjusted, plaster dressings were then applied in the usual manner. The patient was directed to remain on the sofa for a couple of hours, and afterwards to be conducted carefully to bed. A draught, containing thirty drops of laudanum, was ordered to be taken at bed-time.

17. He had some pain during the afternoon subsequent to the operation, but was quite easy all night, although he did not sleep much. The dressings had not become loose, and were, therefore, not disturbed.

19. No pain since last report. The dressings were removed for the first time since the operation; there is but little inflammatory action apparent; the wound seems to have nearly healed, and there is no constitutional disturbance; bowels costive. Ordered to take a senna draught.

23. The dressings have been changed every day since the last report. Slight inflammation continues. Omit the plaster strips, and apply instead the saturnine lotion; senna draught to be repeated occasionally.

No unpleasant symptoms occurred after this, and the patient left the hospital at the expiration of about a fortnight from the last report.

Dec. 11. The eye has long since recovered from the immediate effects of the operation, but the pupil is blocked up with opaque capsule, so that he has very little vision. A cataract needle was this morning introduced posteriorly, and the capsule divided and freely lacerated. After the operation he could clearly discern all the objects around.

13. The opaque capsule, which after the operation had receded into the posterior chamber, has again advanced into the pupil, so that vision is still much impaired. There is but little inflammation of the eye. Ordered to use the saturnine lotion and to take a purgative occasionally.

Feb. 5, 1842. The opaque capsule is nearly absorbed, or otherwise removed, but there still remains a small portion, like a piece of fine thread, stretching across the lower part of the pupil. A needle was again introduced, and the piece of capsule cut across. Immediately afterwards he was able to read very small print at the ordinary distance. But trifling irritation occurred from this operation, and in three or four days afterwards he was enabled to return home.

The result of the operative proceedings in this eye were in the highest degree satisfactory, for, as the patient himself stated, he could now see with it as well as he had done any time during the last twenty years. He could read small print at the usual distance, and see surrounding objects a great way off. Looking at objects through a hole in a card improves his vision slightly, but no other optical contrivance is of any service. The cornea of this eye, when contrasted with the other, is seen to be considerably less conical —indeed, it may be said to have lost its conical shape altogether—whereas previous to the operation it was the most so. This result would, probably, be due to the contraction of the substance of the cornea during the healing of the wound.

The improvement of this eye being so great, and the right remaining not merely useless, but a source of confusion to the other, he was desirous that it should also be subjected to the same operative proceedings, and it was accordingly determined to gratify his wishes.

March 12. A small aperture in the lower border of the cornea of the right eye was made with a cataract-knife, through which the sharp-pointed iris-hook was introduced, and a piece of the iris drawn out and snipped off with scissors. The pupil was now found to extend quite down to the margin of the cornea and remained perfectly transparent, precisely as had occurred in the other eye. The usual dressings were applied.

15. Scarcely any inflammation has resulted, nor has he experienced any pain. Vision, however, has undergone no change, and looking through a small aperture in a card was not found to be of any service.

April 23. He has been somewhat out of health since the last report, but now states that he is quite recovered, and anxious to proceed with the further treatment of his case, as no benefit has resulted from the previous operation on this eye. The operation of extracting the lens by the upper section of the cornea was accordingly performed this morning, and effected with the greatest ease, the crystalline readily escaping without any loss of vitreous humor. The usual treatment was afterwards resorted to. As the result of the operation on this eye was unfortunate, it will be needless to detail the particulars. It will be sufficient to state that, up to the end of the first week, the patient went on remarkably well. He had then a severe attack of inflammation, which assumed the character of ophthalmitis, and terminated, notwithstanding the employment of active antiphlogistic treatment, in suppuration and atrophy of the globe. After the operation he was very inattentive to the directions given—got up and went about the house, and even out of it, at the expiration of the third or fourth day, the weather being at the time extremely hot and sunny, so that the result is not surprising.

REMARKS.

Notwithstanding the unfortunate termination of the last operation, it will be quite clear that the change in the position of the pupil, and the subsequent removal of the lens, are processes well calculated for the improvement of vision in a class of cases which are usually abandoned as hopeless and irremediable. It will be seen that but little is to be expected from the mere change in the position of the pupil; whilst, on the other hand, it appears certain that a greater improvement will result by effecting that change

before the removal of the lens, inasmuch as the opacity of the cornea will otherwise materially obstruct the passage of the rays of light. Extraction, when not contraindicated by particular circumstances, is probably the best mode of removing the lens, because, after a wound of the cornea, a certain degree of contraction of its texture, and a consequent depression of the cone, is almost sure to follow. Such, at least, happened in the present case; and probably this mode of treating conical cornea, when other means are abandoned, is the most perfect of any that can be adopted, embracing, as it does, three distinct and important points—first, a change in the position of the pupil; second, the removal of the crystalline lens; and, third, an alteration in the figure of the cornea.

BIRMINGHAM PATHOLOGICAL SOCIETY.

July 4, 1842.

Dr. Blakiston, in the Chair.

DISEASED HEART, WITH ATROPHY OF LUNG.

Mr. Russell brought before the society the heart and left lung, with the vessels and bronchi, which were taken from a lady, seventy-two years of age, tall in her person, with a lateral curvature of the spine. For several years she had an irregular pulse and frequent attacks of dyspnœa, and was in the habit of taking great quantities of food to allay a sensation of sinking from which she suffered; she had also frequent attacks of sickness. About four years ago she was first seized with pain in the head, which was succeeded by violent pain in the lower part of the abdomen; it was attended with obstinate constipation; but when this symptom was relieved, the violent pain still continued, and was only mitigated by frequent doses of morphine. No examination threw any light upon the cause or nature of this pain. She recovered from her illness, and was enabled to renew her habit of visiting amongst her friends.

Perspirations and repeated attacks of dyspnœa contributed to weaken her, and it became extremely painful to her to walk up the slightest ascent. During the last twelve months, the attacks of dyspnœa increased in frequency and severity; she complained of extreme restlessness and excessive weariness, and was never so comfortable as when moving about in her pony gig in the open air; even in cold days she would beg to have the windows of the room opened.

The respiratory murmur was distinctly heard on the right side of the chest, and it was extremely feeble on the left.

All her symptoms of difficulty of breathing, with great irritableness and restlessness, increased during the last month, and she died suddenly early in the morning of May the 20th.

Post-mortem Examination, May 21.

The pericardium was adherent to the left pleura costalis, so as to completely conceal the lung on that side. A large quantity of fluid was collected in the left side of the chest. The lung on that side was very small, and lay at the posterior part of the chest. It, together with the heart, was removed from the body to be examined afterwards. A large curvature of the spine, which encroached greatly upon that side of the chest, was then seen.

The liver was very large and granulated. The gall-bladder was also very large, and filled with thin green-colored bile; it also contained a very large gall-stone. Spleen large, and its external coating covered with lymph. The uterus was very large, and thickly coated with tubercular matter, which was of a hard osseous texture.

The right lung was not removed from the chest; it was healthy. The following is the state of the left lung and heart:—

The left lung was contracted to less than a third of its normal size, and atrophied, but crepitated on pressure, and was of such specific gravity as to float upon water and keep up the heart and vessels attached to it; its pleura rough and generally thickened, and appeared to bind down the lung to its present size, for in places where the pleura is thinner, the lung was protruded in finger-like projections, as if it had forced itself through apertures, or thin places in the pleura, in a hernia-like manner; the bronchial veins were contracted; the pulmonary arteries dilated.

Heart.—Left auricle rather dilated; tricuspid valves healthy; left ventricle rather dilated, and if hypertrophied, very slightly so; sigmoid valves nearly healthy, rather thickened in their middle portions; and at their sides, or union with the artery, the upper edges are thinned and separated into threadlike bands; the aorta and its branches dilated; the foramen ovale somewhat imperfectly closed, being in such a state as to admit the passage of a probe in four places through valvular apertures; mitral valve contracted and thickened; right ventricle dilated; pulmonary artery and its divisions dilated; sigmoid valves healthy.

ANEURISM OF AORTA.

Dr. Fletcher then brought before the society a specimen of aneurism, by dilatation of the arch of the aorta, in which also the arteria innominata was implicated, and showing compression to a great extent of the superior vena cava. It occurred in the person of Mr. E., aged fifty-five, rather corpulent, who presented himself to Dr. Fletcher as a patient, March 13, 1841. He stated that he had suffered from asthma for some time, and a troublesome cough on taking cold at any time, to which he was very subject; he has difficulty of breathing on any exertion, and cannot walk up hill without resting frequently; he is very often so giddy, that he is near falling in the street.

On examining the chest, it was found to move freely in the actions of expiration and inspiration. The impulse of the heart was greater than normal.

On percussion, there was found dulness at the upper portion of the sternum, extending to the right side, which occupied the upper portion of the sternum as far down as to the space between the second and third ribs, and extended about an inch and a half to the right of the sternum; no impulse was communicated to the hand, in this situation, from the beating of the aneurismal tumor, but there was a distinct pulsation felt, on pressing the finger down, behind the right clavicle, as from a dilated aneurismal tumor; the head and neck appeared puffed, and the circulation in the veins impeded; the pulse was 90, and full.

Auscultation did not enlighten the case; there was no souffle.

Diagnosis.—Aneurism of the arch of the aorta.

He was prescribed as perfect rest as possible, and medicines calculated to promote healthy secretions from the chylopoetic viscera, and to tranquillise the circulation.

March 31. On examining the pulse at both wrists, a manifest difference was found to exist between them; the left, which had been the one previously examined, was about as above described; but the right had the resillient character, a pulse so well described by Dr. Billing as resembling the pulse of a person laboring under profuse perspiration, which induced Dr. Fletcher to add to the previous diagnosis—the aneurism implicating the root of the arteria innominata. There was some irregularity of the action of the heart.

April 6. Mr. E. called upon Dr. Fletcher at four o'clock, p.m., after having taken rather more exercise than usual. He seemed sensible, but could not answer questions. He pointed out his belly, which was so much swollen as to prevent his being able to button his trowsers. The legs were œdematous. The action of the heart was very irregular, and the pulse quick and irregular. Dr. F. immediately sent for his son, thinking him in such a state as to require the aid of his friends. Immediately the servant had left the house, Mr. E. was attacked by strong convulsions, during which his face and head became suffused, and quite red, as from determination of blood to the head. Dr. F. sent off another servant for his neighbours, Mr. Baynham and Mr. Tarleton, who kindly came immediately to his assistance; but they only arrived just in time to witness the death of the patient.

Post-mortem Examination, Thirty-eight Hours after Death.

Body corpulent; legs œdematous; decomposition not at all commenced.

Head.—Brain and membranes perfectly healthy.

Chest.—Heart generally enlarged; the parieties of the cavities of which are all equally hypertrophied; the auriculo-ventricular valves healthy, as also the pulmonary sigmoid; the aortic aperture is about its usual size; the valves diseased and ineffective; the whole ascending portion and arch of the aorta are generally and nearly equally dilated, and measures about nine inches in circumference; the opening of the arteria innominata and the artery itself, in its subclavicular portion, and as far as its axillary portion, are dilated considerably; the right and left carotids and left subclavian are healthy. About two inches beyond the left subclavian the aorta becomes abruptly contracted to the usual size of its descending portion, and just below the subclavian there is an aneurismal bulging and thinning of the coats of the dilated portion—an aneurism supervening upon an aneurism. The whole of the internal surface is lined with ætheromatous deposit; at the posterior and upper portions of this dilatation is the descending cava, much flattened and compressed by it.

Lungs congested, otherwise healthy.

The liver and viscera of the abdomen, as we were pressed for time and under strict promise to do no more than urgently necessary, were only sufficiently examined to enable it to be stated, that there was no important disease in any of them.

The great points of interest in this case, Dr. Fletcher said, appeared to him to be the existence of the resillient pulse, by which means he had been enabled to place the seat of the disease in the arteria innominata, as well as in the aorta; and the compression and situation of the superior vena cava, by which was demonstrated the possibility of an aneurism of the arch of the aorta bursting into that vein—a circumstance which had been alluded to by M. Begin, in his article on aneurism, in the "Dictionnaire de Medecine et de Chirurgie Pratique," as a possible termination of an aneurism in this situation, and of which an example has lately occurred in Birmingham.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The President in the Chair.

June 20, 1842.

A Case by Henry Ancell, Esq.

This paper is of considerable length, and, as it consists almost entirely of the details of the case, and the post-mortem examination, it is impossible to give an abstract of it which would do justice to the author.

A Memoir on Tubercle of the Brain in Children. By P. Hennis Green, M.B. (Communicated by Dr. Burgess.)

This memoir contains a complete history of cerebral tubercle in children, derived chiefly from thirty cases, an analysis of which the author had previously placed before the society in a tabular form.

Having contrasted the rare occurrence of this disease in the adult, with its frequency amongst children, and shown from the statistics of the children's hospital that it occurs once in every fifty cases of acute disease, the author first describes the seat, volume, and number of cerebral tubercle in children. He then points out the pathological appearances produced by tubercle of the brain. The symptoms of the disease are next described at considerable length. In five cases no symptom whatever occurred; in five other cases only a single symptom. The other cases are arranged under the chronic and acute stages. The chronic stage varied in duration from six weeks to two years; the acute, from a few hours to eighteen days.

It is extremely difficult to group together the symptoms of this disease so as to furnish a general description, because the symptoms are very irregular, and succeed each other at long or uncertain intervals. The author, however, arranges the symptoms of the chronic stage of cerebral tubercle under three classes, which he describes in succession, and from which it results, that the principal symptoms are headache, partial or general convulsions, paralysis or contraction of certain muscles or limbs, change of temper, and amaurosis.

In the acute stage the symptoms are likewise very irregular; but they generally assume more or less of the characters of acute hydrocephalus, or softening of the brain.

Upon this point the author lays some stress, because it explains a great many of those cases of irregular hydrocephalus which have attracted the attention of writers.

The diagnosis of the disease is next discussed; and

the author endeavours to show, that the only organic disease of the brain with which cerebral tubercle is likely to be confounded, is chronic meningitis.

The treatment, which can only be palliative, is dismissed in a few words.

On Cysts occurring in the Neck, but not necessarily connected with the Thyroid Body. By B. Phillips, F.R.S., Surgeon to the St. Marylebone Infirmary.

The object of this paper is to show that there are encysted tumors developed in the neck, commonly after the prime of life, and having no necessary connection with the thyroid body, although, in their progress, they may implicate that organ to a certain extent. These cysts are usually first seen at a certain distance from that organ; and in obtaining a history of that disease, at the time when it presents the appearance of a thyroid tumor, care must be taken to ascertain this point. The cyst is filled with a serous fluid varying in color from straw to a dark coffee-like appearance, and coagulable by heat. It may acquire a very large size: in one of the cases which occurred to the author of the paper, it was estimated that the contents amounted to six or seven pints; but even then it is the bulk only which interferes with the functions of neighbouring organs. The fluid may be discharged by puncture, but the tumor will refill; injections are either too stimulating, and produce much disturbance, or are too irritating to modify the surface of the cyst. The plan first used by Mr. Hall, of Dumfries, of passing a thread or two through the cyst, so as to form a seton, seems to be the best mode of treatment.

The paper details several cases, and some dissections.

A Communication describing a Case of Irregular Formation of the Heart, accompanied with a Supernumerary Valve in the Pulmonary Artery. By Theophilus Thompson, M.D.

The patient from whom the materials of this communication were obtained was an unmarried woman, aged 38. She had manifested no indication of bad health or organic disorder till her strength was impaired by an attack of cholera, and still further deteriorated by fever, after which she suffered from palpitation, and exhibited a livid complexion, with a drowsy, apathetic expression of countenance. The action of the heart was weak; the first sound more flapping, the second less distinct than natural. The weakness progressively increasing, her legs became œdematous, and subsequently erysipelatous and gangrenous, and she died with bronchial congestion, anasarca, and effusion into the peritoneum, pleura, and pericardium.

The heart was larger than natural, and exhibited a circumscribed dilatation at the part of the right ventricle more immediately connected with the pulmonary artery. The right ventricle was divided into two chambers by an imperfect septum, composed not of a uniform fleshy wall, but of decussating and hypertrophied columnæ carnæ, some of which, separating from each other near the base of the ventricle, left an aperture of communication about an inch long and half an inch broad, and nearer the apex were a few smaller interstices among the columns; the connecting isthmus was partially covered by one of the divisions of the tricuspid valve.

The circumference of the pulmonary artery exceeded that of the aorta by nearly an inch, and was furnished with four semilunar valves of equal size, each well developed, provided with a corpus sesamoideum, and about nine-tenths of an inch in diameter.

An increased number of valves in the pulmonary artery is a very rare occurrence, and the present example is peculiar in the equality of the valves; thus furnishing an exception to the rule deduced by Meckel from the recorded instances.

The partial division of the right ventricle into two cavities affords another interesting deviation from natural development.

ACADEMY OF SCIENCES, PARIS.

July 4.

MEMBRANA DECIDUA.

M. Coste read a memoir on the structure of the membrana decidua, of which the following are the conclusions:—

1. In the human subject the decidua presents three openings, two towards the orifices of the Fallopian tubes and one at the neck of the uterus.

2. The membrane is not simply in contact with the surface of the uterus, but adheres so closely to it that that the two tissues seem to be confounded together.

3. Instead of being a mere layer, without any organisation, the decidua contains an immense quantity of blood-vessels of large calibre, rendering it as vascular as the spleen or thyroid body.

RE-VACCINATION.

M. Lemazurier communicated the results of re-vaccination performed on 109 pupils at the Royal College of Versailles. All the pupils, except 15, bore marks of former vaccination, and all of them had certificates of vaccination when admitted into the college; a few had been re-vaccinated without success. The pupils ages were from 14 to 15. Three points were inserted into each arm. On examining the children on the fifth day after re-vaccination it was found that in 6, no effect whatever had been produced; in 27, true vaccinia with all its characters existed; in 25, there were imperfect vaccine vesicles; and in 51, the eruption produced was the common false vaccine, which already commenced to dry off.

TERMINATION OF NERVES.

M. Mandl addressed a memoir on the mode of termination of the nerves. The point which chiefly engaged the attention of the author was the manner in which newly-formed parts acquire nervous filaments. M. Mandl has observed that the bundles of nerves of young animals are not furnished with neurilema. When the new tissue is formed, a few corpuscles are seen to be developed between the primitive fibres of a bundle; one or more elementary fibres are thus separated from the rest of the bundle, and as the corpuscles become developed, and new ones arise, the primitive fibres are gradually separated from each other, until they form a festoon, at the extremity of the nerve. The author, however, does not pretend to say that new tissue is only formed between the primary fibres of the nerves. It would also appear to result from the author's researches that the number of primitive nervous fibres is the same in young and adult animals, since a fibre is never seen to divide into two. These

observations are most easily made on the transparent tail of the tadpole.

STRUCTURE OF THE RETINA.

M. Mandl concludes his memoir by some remarks on the structure of the retina. This membrane is composed of two distinct parts; the internal, or that in contact with the vitreous humor, is composed of the same elements as the cortical substance of the brain. The external portion contains, besides blood-vessels and the expansion of the optic nerve, a peculiar structure which the author compares to rods (*baguettes*). The form, length, and breadth of these appendages vary considerably in the different classes of animals; they are best seen in fishes or birds; in the latter they are from 1-50th to 1-100th of a millimetre in length and 1-300th in breadth; at the external end they contain an oily globule of a yellow or reddish color, and internally they terminate in a delicate thread; they do not seem to be connected with the optic nerve. The eyes must be quite fresh and the retina examined in the fluid of the vitreous humor, for any other kind of fluid changes the form of the elementary parts of this delicate membrane.

ACADEMY OF MEDICINE, PARIS.

July 5.

RECOVERY OF MOTION AFTER RESECTION OF THE ELBOW-JOINT.

M. Robert, surgeon to the hospital Beaujon, presented a female, aged twenty-six, on whom he had performed the operation of resection of the elbow-joint.

After a fall on the elbow, the joint had become carious, and two fistulous openings had formed, but the surrounding tissues were not much tumefied.

The method adopted was very similar to that described by M. Velpeau, in his work on operative medicine. The humerus was sawn through immediately above the condyles; the ulna below the coronoid process, and the radius a little below its head, so that about four inches of bone were removed. The limb was now placed in M. Guyot's apparatus; no reaction took place, and even the febrile symptoms, which were present before the operation, disappeared.

The discharge of pus continued for a considerable length of time, and as it was impossible to bring the bones together, the wound did not heal before the expiration of eighteen months. Two years and a quarter have now elapsed since the operation, and it is a matter of some interest to observe the manner in which the motions of the forearm and hand are executed. The limb is now nearly of the same size as the opposite one; when the arm is allowed to hang down by the side, a separation of about three inches may be felt between the extremity of the humerus and the upper part of the bones of the forearm. In this position the arm looks, as it were, paralysed; but when the patient makes an attempt to bend it, the space between the divided bones seems to disappear in consequence of the ascension of the forearm; the ends of the radius and ulna obtain a point of support on the extremity of the humerus, and flexion takes place to the extent of a right angle. The patient carries the hand easily to the head, or to the shoulder of the opposite side, and can raise a heavy weight with it. The movement of pronation is pretty free, and those of the fingers perfectly so. Within the last few months the patient has been able to resume her occupation of sempstress.

July 12.

DECUSSATION OF THE FIBRES OF THE BRAIN.

M. Begin read a report on a memoir of M. Foville relative to this subject. Hitherto (said M. Begin), the effects of injury to one side of the brain, manifested by paralysis of the opposite side of the body, have been explained by the decussation of the pyramidal bodies; but many physiologists have been struck with the difficulty of admitting that the numerous fibres of the cerebrum could be represented by the small number of fibres which cross each other in the pyramids. M. Foville shows, in a clear and decisive manner, that the decussation of the two sides of the brain takes place over a much greater surface than has generally been supposed; he proves that the nervous fibres decussate all over the floor of the aqueduct of Sylvius, and in the calamus scriptorius.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JULY 23, 1842.

The tenth anniversary meeting of the Provincial Medical and Surgical Association will take place on the 4th and 5th of next month, at Exeter.

It gives us unfeigned pleasure to announce to the friends of the Association, and to all sincere supporters of the dignity and status of the medical profession, that the affairs of the Association are in a most prosperous state. Nearly two hundred new members have been added to the ranks of the Association since the commencement of the present year, and there is every reason to believe that a considerable accession of associates will take place at the approaching anniversary.

It is unnecessary for us to dwell on the advantages derived from connection with the Provincial Association; the fact which we have just stated proves that these advantages are duly appreciated by medical men in all parts of the kingdom; and from the steady, and at the same time rapid, progress of the society, we feel some confidence in anticipating that it will soon embrace a considerable majority of English provincial practitioners.

The meeting of the Association at Exeter will, probably, be a numerous one. Many questions of deep importance to the profession await a solution. The most pressing are those connected with poor-law medical relief and medical reform. Both these questions have arrived at a certain point of maturity, and, with good management, unity, and zeal, they may be conducted to a happy consummation. The efforts of

the council of the Provincial Association have been unceasingly directed to obtain a just arrangement of these two essential questions; and we earnestly entreat all members of the Association, and all true friends of our profession, to join heart and hand in aid of the good work which is now on the point of being completed.

The concessions which have been granted to the long-neglected remonstrances of the profession on the subject of poor-law medical relief are many and important, but the question still remains in an unsatisfactory position. Her Majesty's Government has not thought proper to incorporate any provisions relative to medical relief in the Poor-law Amendment Bill. The whole subject has been laid before ministers by the poor-law committee of the Association, and the features of the several plans which their experience suggested were carefully explained to them; but the law observes an absolute silence on topics of vital importance to the poor and the profession; the medical regulations are, as heretofore, to depend on the dicta of the commissioners, and, with the experience which we possess of their capabilities and tendencies, it remains to be seen whether any further efforts should be made to withdraw us from Somerset-house dictation, and place us under the law of the land. A recent declaration of Sir James Graham encourages us to hope that we have time left to make, at least, an effort.

On the subject of medical reform, the conduct of the Provincial Association has been marked by that prudent spirit which its peculiar constitution enjoins, and which arises, moreover, from a thorough knowledge of the real wants of the profession. But the prudence of the council has not prevented it from acting with becoming energy whenever circumstances demanded prompt and decisive action.

In an article which we published on the 9th instant, we drew attention to certain facts elicited from Sir James Graham by Lord John Russell in the House of Commons, and expressed our fears that an attempt would be made to substitute a partial measure of medical reform for the complete and comprehensive adjustment to which the profession looked forward; at the same time, we anticipated the immediate adoption of energetic measures by the council of the Association, in whose experience and judgment we placed implicit confidence, and by other bodies not less warmly interested in the final settlement of this long agitated question.

We feel gratified in announcing that our anticipations have been fulfilled, and that the measures so promptly adopted by the different medical associations have been crowned with complete success.

In another part of this Journal will be found the petition forwarded by the North of England Association; similar petitions were presented in the course of the week on the part of the Provincial Association, the British Medical Association, the Cornwall Association, and several other associated medical bodies; all were unanimous in condemning the idea of granting any new charters to the Colleges of Physicians or Surgeons until the whole question of medical reform had been brought before the notice of Government and the Legislature; in other words, they repudiated the proposal of making the interests of the profession subservient to one or two medical corporations—of sinking the national question of medical reform in the partial correction of metropolitan abuses.

The Home Secretary has, in this instance at least, been influenced by the expression of what we may call popular opinion. Sir James Graham announced, in the House of Commons, on Wednesday last, that he did not intend proceeding with his bill relative to the charters of the metropolitan colleges during the present session. Valuable time has thus been gained, and we trust to see it turned to a good account. The object of the Colleges of Physicians and Surgeons has been defeated. For their own sakes we could have wished that they had been less precipitate—less anxious for their own interests and more ready to sacrifice personal considerations for public good and the benefit of that profession which they affect to represent. Their disappointment, however, may lead to useful results. Defeated in their attempt to obtain fresh powers from the Legislature at the close of the session, the colleges will perhaps, be more inclined to listen to the suggestions which emanate from the *real* representatives of the profession; to act with the associations (for *we* never advocated the destruction of the medical corporations) for the benefit of all, instead of losing their legitimate share of power, by attempting to grasp too much; in a word, to place themselves frankly and openly at the head of the movement, instead of involving themselves in ruin by an useless attempt to divert or disperse a force which they cannot resist.

We are entitled to address this language to the medical corporations, because the acts of the Provincial Association have abundantly proved that they are actuated by no desire to injure existing institutions; the representatives of the Association, as is well known, withdrew from the conference at Exeter-hall, because they were unable to carry a proposition which announced "respect to existing medical institutions, provided their existence could be rendered compatible with certain avowed principles of medical reform." It remains, then, for the corporations to declare whether they will accept these conditions, or persevere in the course of selfish isolation from the great body of the profession, which has reduced them to their present helpless and destitute state.

The opportunity which now offers should not be rashly or carelessly thrown away; if the question of medical reform admit of any peaceful adjustment

between the profession on one side and the corporations on the other—if King John consent to grant a charter to his barons—the season is at hand, and with mutual concession a fair, and we believe a satisfactory, conclusion may be arrived at.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NEWTON BRANCH.

The sixth annual meeting of the members of this Branch Association, was held at the Legh Arms Hotel, Newton in the Willows, on Thursday the 7th instant. Dr. Kendrick, of Warrington, the president for the year, occupied the chair. Amongst other members present, were—

Dr. Holme, Dr. Black, Dr. Lyon, Dr. Baron Howard, Robert Thorpe, Esq., W. J. Wilson, Esq., Joseph Jordan, Esq., and John Hatton, Esq., of Manchester; Dr. Jeffreys, Dr. Scott, and Dr. Murphy, of Liverpool; Dr. Green, of Newton; William Tweenlow, Esq., of Northwick; Richard Broadbent, Esq., of Altrincham; J. M. Robinson, Esq., of Bolton; John Sharp, Esq., G. W. Hardy, Esq., Edwin Steel, Esq., and William Hunt, Esq., of Warrington; Oswald Dicken, Esq., of Middleton; and William Manley, Esq., of Tyldesley.

Dr. Kendrick, on taking the chair, observed that he felt much averse to being placed in such a conspicuous situation, yet he hoped the members present would not think him insensible of the honor conferred upon him. After a few other remarks, he requested Mr. Hardy, one of the general secretaries, to read the "Report of the Council," from which we select the following paragraphs:—

"At the last annual meeting a discussion arose respecting the best means of rendering our resources subservient to medical science; and a meeting of the council was specially ordered 'for the purpose of making some arrangements, by which the scientific objects of this Association may be efficiently carried out.' The council conceive that, in the absence of any subject for special investigation, all that is at present attainable, is to economise the time allotted to scientific purposes at our various meetings; to encourage the free presentation of oral and written communications on any and every subject connected with the profession, but more especially such as are of a practical nature; and to adopt such regulations as shall ensure their being duly brought before us.

In the consideration of this subject, your council have not overlooked the value of oral discussion in determining controverted questions of great importance in practice; and believing that our annual meetings present favorable opportunities for bringing the united experience of every member to illustrate and unravel them, they are of opinion that, whenever circumstances will permit, every encouragement should be given to the introduction of questions of this kind. On the present occasion, if time will allow, they doubt not that the subject which has been proposed for discussion—namely, 'The propriety or impropriety of immediate amputation in certain serious railway accidents,' will receive that patient consideration which its great importance demands; and they sincerely hope, that it may lead to the method of treatment being established on principles so fixed and determinate, as to be worthy of universal adoption.

Your council have not the satisfaction of being able to announce to you the adjustment of the great question of medical reform, which has so long agitated the profession. They have pleasure in knowing, however, that it has made considerable progress during the past year. The principles which have uniformly been insisted on by the Provincial Association as the only basis of sound legislation on this all-important subject, have obtained the almost unanimous support of the profession; and the well directed efforts of this and other kindred associations to bring it before the legislature, have at length induced one of her Majesty's ministers to promise his aid in remedying the evils so long, and so justly, complained of. The bill which Sir James Graham has prepared, and which would have been submitted to Parliament during the present session, had not other urgent business interfered, has not yet been made public; but it appears that some of its provisions have been communicated to the Medical Association of Ireland, which has unanimously adopted a resolution expressive of its approbation of the measure. Such a resolution, however, your council conceive to be premature. Considerable time must necessarily elapse before the bill can be proceeded with: and the powerful appeal made by Sir James Clark, and other distinguished ornaments of the profession, may possibly lead to more mature consideration of its details, and the adoption of a measure more consonant with the anxious wishes of the profession. Your council, therefore, consider that they should not be justified in offering any opinion on a bill which they have had no opportunity of perusing; and they see no grounds for relaxing in their efforts to obtain a full and complete measure of reform.

Your council are enabled to report some improvement in the medical management of the sick poor of this country. On the 12th of March last, the poor-law commissioners issued their new regulations, which have been deemed worthy of a Special Report of the Poor-Law Committee of the Provincial Association, which is now in the hands of every member. With the opinions expressed in that report your council fully concur, and although they acknowledge that some good has been effected, yet (adopting the language of the parent Association) they consider, 'that the question still remains in an unsatisfactory state, and that the profession have not yet obtained that measure of justice, which is essential to the welfare of the sick poor, and would prove beneficial to the whole community. They nevertheless congratulate the members upon what has been accomplished, and hope that the wide diffusion of right views and principles, which the Provincial Association have been instrumental in promoting, may in the end produce further results, alike advantageous to the members of our profession, and gratifying to every humane and philanthropic mind.'"

The reading of the report having been concluded, it was unanimously resolved, on the motion of Mr. Hatton, seconded by Mr. Hunt, "That it be adopted and printed for distribution to the members."

The thanks of the meeting were then severally

voted to the president, vice-presidents, and secretaries, for their services during the past year; and the following gentlemen unanimously appointed to succeed them :—William Tweenlow, Esq., of Northwick, President; Dr. Macrorie, of Liverpool, and W. J. Wilson, Esq., of Manchester, Vice-Presidents; and Dr. Scott, of Liverpool, and John Hatton, Esq., of Manchester, General Secretaries. Dr. Carson, and Mr. Eden, of Liverpool, were also added to the council in lieu of Dr. D. Baird and Dr. Bryce.

The necessary arrangements for the management of the Association having been completed, the president called upon Dr. Murphy, of Liverpool, for his promised paper "On Paraplegia." The Doctor related a number of cases which had occurred in his practice, and in the course of his observations endeavoured to show—1st, That some cases of paraplegia are owing to effusion of serous fluid consequent upon subarachnitis; the fluid subsiding to the lowest part of the spinal cavity, as once maintained by Dr. Baillie. 2nd, That this form of the disease can be detected by its history and symptoms, which are usually of a febrile character, sometimes allied to synochus, with pain in the head, and loss of power in the lower extremities. 3rd, That one peculiarity of this form is that the functions of the bladder remain unimpaired; and hence that life is not endangered. 4th, That an antiphlogistic treatment, comprising venesection, blisters to the sacrum, mercury, low diet, &c., when properly employed, is generally successful in removing the disease. 5th, That this treatment has been successful in cases of six and eight months' standing, though the younger the patient, and the earlier and more energetic the treatment, the greater are the hopes of relief. 6th, That in chronic cases, where other means of relief fail—trephining the sacrum may be practised as a painless and safe operation.

A long and interesting discussion followed the reading of Dr. Murphy's paper, in the course of which Mr. Wilson inquired if any cases of active hæmorrhage within the spinal canal had come under his (Dr. Murphy's) notice. He (Mr. Wilson) related the particulars of the case of a child six years old, which, without having received any local injury, first lost the use of one lower extremity, and then the other. The patient was under the care of Dr. James Bardsley; but in consequence of paralysis of the bladder having supervened, he was called in on the third day. After languishing in great pain, the child died at the end of seven weeks. On examination, he found that mortification of the nates had taken place, and within the lower part of the spinal canal there was a clot of blood several inches in length.

He (Mr. Wilson) also mentioned the case of a young lady, who, after having been fatigued with dancing at an evening party, found her extremities to become powerless whilst seated at the piano forte the following morning. She died in a few hours after. On making a post-mortem examination, which Mr. Jordan attended, blood was found extravasated within the lower dorsal portion of the spinal canal, but none in the upper—a circumstance which gave a peculiar feature to the case, inasmuch as the upper extremities were as powerless as the lower from the commencement of the attack.

Dr. Murphy, in reply, said he had not met with any case similar to those related by Mr. Wilson, but observed, that in all the fatal cases he had witnessed, paralysis of the bladder had taken place.

Dr. Jeffreys mentioned a distressing case occurring in his practice, immediately after the lamented death of Dr. Rutter, in which he should say the patient died from sphacelus of the nates, rather than the original disease. These remarks led to a discussion respecting the ammoniacal state of the urine in this disease, and the cause of sphacelus of the nates taking place. On the latter question a variety of opinions were expressed, but

Mr. Jordan thought it was the constant lying or pressure on parts possessing diminished vitality, and not the irritation set up by the acrid urine voided, as some seemed inclined to believe; though this, he had no doubt, aggravated the case, when once the peculiar morbid action was begun. He thought, if the acrid urine was the sole cause, it must affect all the parts exposed to its action; but it was well known that sphacelus in these cases only occurred where the pressure was the greatest.

In reference to hysterical paraplegia, which Dr. Murphy said he had never met with, Dr. Holme narrated a remarkable case of some two years standing, which had been seen by Mr. Jordan as well as himself, which left no doubt on their minds as to its hysterical nature; and the treatment pursued, with its results, seemed strongly to confirm this view of the case.

Mr. Manley related a case of paraplegia occurring in a female, who had been actively engaged in dancing at a Christmas party. There was entire loss of use in the lower extremities, which continued for a fortnight, and so entirely was she deprived of sensation in them, that although he blistered her feet with the blaze of a candle, she could not feel it. Bleeding and a variety of remedies were had recourse to without much effect. She suddenly recovered, however, on the application of a mustard poultice to the loins, which was allowed to remain on for two hours.

At the conclusion of these remarks, Dr. Holme expressed himself as highly gratified with the discussion which had just taken place, and moved "That the thanks of the meeting be given to Dr. Murphy for his interesting and valuable paper." The motion was seconded by Mr. Wilson, and carried unanimously.

Mr. Thorpe exhibited a large calculus which he had extracted from the bladder of a female, by dilating the urethra with an instrument made by Weiss, and formerly recommended by the late Sir Astley Cooper. The whole operation occupied only twenty-five minutes, without any previous preparation, and the power of the bladder was restored in two days. The patient, who was betwixt thirty and forty years of age, entirely recovered in seven or eight days.

The President, at the general request of the meeting, expressed a wish that Mr. Jordan would relate the particulars of a case of stone in which he had lately operated.

After a few introductory observations, Mr. Jordan said, the attention of the profession had often been directed to the various modes of opening the bladder. A short time ago he had a lad of about seventeen years of age as a patient, who exhibited the usual signs of stone in the bladder. Besides these, he

vented wind by the urethra, and there was an excretion of pus and urine from the rectum. The bladder was sounded by himself and colleagues; the sensation produced was of a dull, grating character, but they all agreed that the symptoms were not sufficiently distinct to warrant his performing the usual operation for stone. It was evident, however, that there was a communication betwixt the bladder and rectum; he, therefore, proceeded to examine where the pus came from, and then found a large substance projecting into the rectum. In order to ascertain the nature of this substance, he passed his knife into it in the mesial line, until it grated upon a stone. The incision was considerable, but there was abundance of room, and it was made with as much ease as if he had been opening an abscess. He then passed his finger into the bladder, and found the stone imbedded in the substance through which he had cut, and projecting into the bladder. He next introduced the forceps, and seized the stone, but, in pulling it out, it broke, and he had to pass the forceps a second time to bring away the remaining portion, which was easily effected. The case after this went on well; in three days the youth voided his urine by the natural passage, the wound as well as the fistulous communication healed, and he is now recovered. Mr. Jordan next adverted to the simplicity of the recto-vesical operation, and proceeded to expatiate on its advantages, when compared with other modes. He also dwelt upon the disadvantages occasionally resulting, and described it as an operation requiring care and judgment. In France, he said the recto-vesical operation was much practised, and with success. On concluding, Mr. Jordan produced the calculus, which was a triple phosphate. It was about three inches long, and three quarters of an inch in diameter, bent in the centre at an obtuse angle, nearly forming the segment of a circle, one end being smooth and rounded, and the other rough and somewhat spiculated. The latter portion, it was supposed, had been imbedded in the substance through which Mr. Jordan had to cut. The nucleus of the stone was formed of a large pin, which the boy had swallowed by the mouth some time before, and the head of which was visible in the centre of the fracture.

Mr. Wilson, at the urgent request of the meeting, gave a brief though luminous outline of the paper he had lately presented to the British Association, and which he is now preparing for publication in the "Transactions of the Provincial Association." It afforded a clear exposition of the relative value of the operations of lithotomy and lithotrity; but, as it is impossible to do justice to Mr. Wilson's observations in a brief notice, we must refer to the publication itself for the full development of his views. On the present occasion, it may suffice to observe that his first object seems to have been to make himself acquainted with the statistics of *lithotomy*, as performed in the Manchester Infirmary and other places. The results of his investigations he contrasted with similar inquiries regarding *lithotrity*, and showed that the claims of this latter operation to our confidence had been greatly overrated, and that the early operators had kept back numbers of their unsuccessful cases. There were instances, however, in which this operation had superior advantages, and in which it might be performed with comparative safety. These he particularised, and concluded by relating a case in which he had performed the operation of lithotrity with fatal results.

Dr. Jeffreys mentioned the case of a highly respectable gentleman in Liverpool, on whom the operation of lithotrity had been performed by Baron Heurteloup himself, in the presence of Sir Benjamin Brodie. Great violence was had recourse to before the instrument could be withdrawn from the bladder, and the patient died in an hour.

Mr. Thorpe said he preferred the old method. He had been connected with the Manchester Infirmary for thirty years, during which he had frequently operated for stone in the bladder, but he had only lost one patient.

The members present manifested a deep interest in what had fallen from Mr. Thorpe, Mr. Wilson, and Mr. Jordan; and it was unanimously resolved, on the motion of Dr. Jeffreys, seconded by Dr. Holme, "That the most cordial thanks of the meeting are due to them for the important information they had communicated on the subject of lithotomy and lithotrity."

Mr. Hardy next read a paper "On an Easy and Effectual Method of Applying Cold to Inflamed Parts," which had been presented by Dr. James Kendrick, jun., of Warrington. The Doctor had sustained a fracture of the right patella, which was followed by very severe inflammation of the knee. Leeching to a great extent and hot fomentations were had recourse to, but the latter afforded no relief. Cold applications were, therefore, substituted in a variety of forms, but they proved "insufficient to moderate the pain and heat of the knee." "In this emergency, it occurred to him that benefit might be derived by quickening the evaporation from the part by the continued motion of a large fan. The almost instantaneous relief which was effected by this means was evident even to the attendants, and still more gratefully" to himself. "From that moment until the period arrived when the suitable bandages could be placed on the knee, it was the sole remedy employed." "Nothing (the Doctor stated) could be more simple than the method of its application. A double fold of fine linen soaked in cold water, and wrung as dry as it can easily be effected without handling it, so as to take off its coldness, is stretched closely on the inflamed part, and a large fan immediately whisked over it in different directions, and with as great rapidity as the urgency of the symptoms may require. When properly done, the effect upon the inflamed part is, beyond belief, salutary. The temperature rapidly sinks, and may be brought so low as to affect the hand of one who touches the ailing part with a sensation of icy coldness. To his own feelings, the rapid motion of the fan could be carried to an extent perfectly insupportable, from the actual pain, accompanied by nausea and extreme depression, which was induced by the great reduction of temperature." The cases in the Doctor's own practice, which afforded opportunity for a trial of the remedy, had been but few. "In two cases of inflammation of the membranes of the brain, occurring in children, and in a third, where effusion had already taken place, he had employed it with striking benefit; and in a case of

strong convulsions supervening upon apoplexy, he also considered it to have been, after bleeding, the most efficient remedy resorted to." The Doctor believed "that its application to the head would, in a short time, subdue even the most violent maniacal paroxysm, more especially if, instead of simple water, the evaporating lotion were employed. The blast from a small pair of bellows would probably render the effect still more powerful." He also believed it to be capable of affording all the benefit derivable from the cold dash, so strongly recommended by Dr. Abercrombie in affections of the head, but, like it, would require to be used with caution, from the powerfully sedative effect which must follow its continued employment." After pointing out a variety of other affections in which this novel remedy may prove efficacious, and also some of the advantages which it possesses from its greater cleanliness, and the ease with which it may be employed, the Doctor concluded his paper by saying, "I have to regret that the instances in which the remedy has hitherto proved useful are but few in number. This, however, is a necessary consequent upon its limited trial. I can only repeat that it has answered my expectations wherever it has been resorted to. It will afford me much gratification to find that the brief and incomplete notice which I have brought before the Association has been the means of procuring it a more extended trial in the wards of an infirmary or lunatic asylum. In either of these its merits or defects would in a very short time be fully demonstrated."

Mr. Higginson, of Liverpool, exhibited a newly-invented speculum vaginæ; after which the members adjourned to

THE DINNER.

The chair was taken by Dr. Kendrick about four o'clock, the vice-chair being occupied by Dr. Lyon, of Manchester.

On the removal of the cloth, the usual loyal toasts of "The Queen," "Prince Albert, and the rest of the Royal Family," were drunk with enthusiasm. These were followed by the health of "Dr. Hastings, and success to the Provincial Association"—"The health of our former Presidents"—"Dr. Kendrick, our respected President"—"The President and Vice-presidents elect"—"Prosperity to the Liverpool and Manchester Schools of Medicine," and a variety of other toasts. We have not space, however, for any notice of the speeches made on this occasion.

Owing to the unfavorable state of the weather, the numbers attending were not so great as at some former anniversaries; but, so far as the objects of the meeting were concerned, it was decidedly the most interesting and the most successful of any which has hitherto been held. The greatest cordiality and good humor prevailed throughout the day, and the company did not separate until the arrival of the eight o'clock trains apprised them that it was time to depart.

MEDICAL REFORM.

In the House of Commons, on Tuesday the 5th instant, some questions were put to Sir James Graham by Lord John Russell, from the answers given to which, it would appear that the Home Secretary intends, before the close of the present parliamentary session, to ask leave to introduce a bill for enabling the crown to grant new charters to the Colleges of Physicians and Surgeons in London, which would come into operation immediately, while the Medical Profession Bill, which the Right Honorable Secretary means to submit to Parliament, cannot be discussed until next session. The Council of the North of England Medical Association, conceiving that the granting of the said charters would prejudge the *general question* of medical reform, have petitioned both Houses of Parliament not to authorise the giving of the said charters until the *whole* subject shall have been discussed by the legislature. The council have also taken steps for sending petitions of a similar kind from Newcastle, Gateshead, Sunderland, Durham, Carlisle, Berwick, North and South Shields, &c. The following is a copy of their petition to the House of Commons, which has been duly signed and forwarded for presentation to Lord Howick. (The Bishop of Durham has been requested to present the Petition to the upper house.)

To the Right Honorable and Honorable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The Petition of the President, Vice-Presidents, and Council of the North of England Medical Association, assembled at Newcastle-upon-Tyne, July 9th, 1842,

Humbly sheweth,—

That your petitioners represent a society consisting of 170 duly qualified practitioners of medicine and surgery, resident in the counties of Durham, Northumberland, and Cumberland.

That your petitioners have derived much satisfaction from the announcement reported to have been made to your honorable house by one of her Majesty's ministers, of his intention to ask leave to bring into Parliament a bill relating to the government of the medical profession in Great Britain and Ireland.

That your petitioners, although unable to procure any *authentic* information respecting the provisions of the above named bill, have been given to understand that a proposition is shortly to be made to your honorable house to enable her Majesty to grant new charters to the College of Physicians, and the College of Surgeons, of London, and that it is intended that such charters, if granted, shall come into operation almost immediately, whereas the clauses of the aforesaid medical bill will not be discussed until the next session of Parliament.

Your petitioners conceiving that the community at large of the United Kingdom is interested in the proper regulation of the medical profession, not less deeply than are the individual members thereof, beg respectfully but earnestly to urge the claims of the profession to the consideration of the legislature. Feeling, moreover, assured that no measure relating thereto can be either satisfactory or beneficial unless it be constructed on broad and general principles, and that the scope and character of any future enactment for regulating the medical polity of this country must be materially influenced by the powers and authority which may be vested in the presently existing medical corporations, they implore your honorable house not to sanction the giving of any new charter to the College of Physi-

cians, or to the College of Surgeons, in London, until opportunity shall have been afforded of discussing fully and carefully the provisions of the medical bill, which they believe the Right Honorable the Secretary of State for the Home Department has signified his intention of submitting to the notice of your honorable house.

And your petitioners, as in duty bound, will ever pray, &c.—*Great Northern Advertiser.*

HOUSE OF LORDS.

July 18.

The Marquis of Lansdowne presented a petition from the Provincial Medical and Surgical Association, an extensive body of medical men connected with all parts of England. The petitioners prayed for certain reforms in the medical profession. They had sent a petition with a similar object last year, and they were again induced to address the legislature in consequence of a declaration made in another place, by the Secretary for the Home Department, of his intention to introduce some measure with respect to medical reform, by reviving some of the medical charters. The petitioners prayed that no such reforms or revivals of charters should be made without a previous strict inquiry as to the state of the medical profession in the provinces. The noble Marquis also presented a second petition from the members of the North Wales Association, which contained a similar prayer.

Lord Campbell presented a petition to the same effect from the British Medical Association.

July 19.

Lord Brougham presented a petition from the members of the Taunton and West Somerset Medical Association, and from two other medical associations, praying that no renewal be made of any charters of medical or surgical bodies, until a full and searching inquiry be instituted into the state of medicine in this country.

The Marquis of Londonderry presented a similar petition from the medical practitioners of South Shields.

HOUSE OF COMMONS.

July 18.

Mr. D. Barclay presented a petition from five physicians and twenty-four surgeons of Sunderland, against granting any new charter to the Colleges of Physicians and Surgeons, of London, until Government had investigated the general question of medical reform.

Mr. Hutt presented petitions from the medical practitioners of Gateshead and other places, against the introduction of any medical regulation bill that was not founded on the broad basis of medical reform.

Mr. Escott presented a petition from the Southern Branch of the Provincial Association, praying that no partial measure of legislation be entertained by Parliament until the whole subject of medical reform has been submitted to the House.

July 19.

Mr. Broadwood presented a petition against granting a new charter to the College of Physicians until the result of a general inquiry on the subject of medical reform should have been placed before Parliament.

Mr. Burroughes presented a petition from a number of medical practitioners, praying for medical reform.

Sir G. Grey presented a petition from the South Devon Medical Association, against any partial medical legislation, until the whole question of medical reform was considered.

Sir C. Lemon presented a petition from the Cornwall Medical Association, against granting any charters to medical corporations until an inquiry had been instituted into the whole subject of medical reform.

July 20.

In answer to a question from a member, Sir James Graham said that he did not think it expedient to bring in the bill which he had announced, during the present session of Parliament, relative to the charters of the Colleges of Physicians and Surgeons.

July 21.

Mr. Mackinnon gave notice that on Thursday, August 4, he would move for leave to bring in a bill to prevent interments in towns, or under churches or places of worship.

ASSURANCE OFFICE FEES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—At the meeting of the Salop Branch of the Provincial Association on the 12th instant, the following resolution was adopted:—"It being the opinion of the members of the Salop and North Wales District Branch of the Provincial Medical and Surgical Association, that no inquiries of insurance companies should be answered, unless accompanied by a fee of £1 1s.—resolved, that, in order to secure unanimity among the members of the medical profession, the subject be referred to the general meeting of the Association at Exeter."

Now it appears to me advisable, that every inquiry should be made on the subject previous to the meeting at Exeter; by which proceeding the members will have an opportunity of forming some general opinion, and the insurance offices of stating their reasons, why such a resolution should not be adopted; and I think no communication can be more appropriately conveyed than through the columns of the "Provincial Journal." I would recommend the perusal of Mr. Harvey's letters in the Journal, No. 10, Vol. I, December 4, 1841-2; also Dr. Jeffrey's letter in No. 4, Vol. II, April 30, 1842; but more particularly the statement of the British Medical Association, in No. 6, Vol. I, November 6, 1841-2; the following is a copy of their resolution, and the letter accompanying it:—

"Resolved, That the members of this Association pledge themselves not to answer the inquiries of Insurance Companies, unless accompanied by a fee.

Sir,—The British Medical Association having, at a general meeting held on the 30th of September, 1837, and at other subsequent meetings, passed the above resolution, I must decline answering your questions respecting the health, and safety of insuring the life of , unless you transmit me the usual fee of one guinea, when I shall give my best attention

to them. The British Medical Association think that this fee should be paid by the assurance companies; but it must be a matter of arrangement between themselves and the proposer, whether it, or any part of it, should be paid by the latter; it should, at all events, accompany the letter which is sent by the company."

There is also a valuable article on life insurance in the "Argus," May 31.

Surely, civility alone, without reference to interest, should induce the offices to consult the wishes of the medical profession, and relieve us as much as possible from a very unpleasant duty imposed upon us for their benefit, of very slight profit to us, and frequently the cause of a most disagreeable misunderstanding between the medical attendant and his patient.

With regard to the medical referee, appointed by the company, it appears to me there cannot be a difference of opinion, that the fee should be £1 1s. in every case; if the offices think £1 1s. too much for a certificate, the insurance being under £300, the profession may think that £1 1s. is too little when the insurance is £1,000 and upwards; if the sliding scale be adopted, it cannot be less than 5s per £100, which would be greatly in favor of the profession.

But the important point is the payment of the private medical attendant.

The officers say, they pay their own medical referee, and that the proposer ought to pay for the certificate of his medical attendant, if payment be required, as the office and proposer are mutually benefited. Such appears a very equitable arrangement; but how does it work practically? The patient refuses to pay. He says the certificate is for the safety of the office, and surely it is most unjust to expect payment from the proposer, when the medical statement is not only strictly private and confidential to the office, but at the same time perhaps so unfavorable as to prevent the party's life being insured. What's to be done? Must the certificate be given gratuitously? Then comes that unpleasant misunderstanding between the medical attendant and patient; the one considering the doctor shabby for requiring a fee, the other considering the patient shabby for expecting to receive gratis a legal document valuable in proportion to the amount insured for. Again, the offices say, if they pay the medical attendant, he becomes their agent, and though there should be an error in his statement, they cannot render the policy null and void; but if paid by the proposer, *vice versâ*. Now, I should say to the officers, if such certificate is worth having, it is worth paying for; if it cannot be trusted, it is not worth having; the offices can make their own terms with the proposer; they may demand a deposit from him to make the necessary inquiries previous to accepting his insurance, which, I believe, is done by some offices; they may also require a declaration from him, that the medical attendant shall be considered his agent; but every policy issued by a company ought to be indifeasible and indisputable, &c. &c., unless obtained by fraudulent misrepresentation. (*Vide* clause 78 of the London, Edinburgh, and Dublin Office.)

By the disunion and opposition of medical men, the offices have been able to bargain with various individuals; and thus they have done their utmost to lower an honorable and useful profession, their best and most natural ally, and, in my opinion, literally their guardian angel.

From the great profits of insurance companies competition has been produced, and new companies have arisen founded on more just and liberal views; most, if not all the new, and several of the old offices, in a spirit of conciliation and equity, pay the medical attendant as well as their own medical referee; and it depends entirely on the Association adopting the proposed pledge, to compel the remaining offices to a similar line of conduct.

Insurance companies are no doubt a great blessing to the country, and so is the medical profession; the profession can do without the offices, but I do not see how the latter can exist without the services of the former.

It is not the wish, I am sure, of any medical gentlemen to be at variance with the insurance companies; but it is the desire, and I trust the determination, of the profession to put an end to the present unpleasant state of affairs; it is surely absurd for us, as a professional body, to petition the Government, however respectfully, to relieve us—no, only a fraction of the profession—from the harsh and unjust clauses of the poor-law, unless we have the decision to apply the remedy to a nuisance affecting every individual member, when the power is entirely in our own hands; whether the sliding-scale or fixed duty be adopted, whether the office or proposer pay, or the certificate be given gratis, and we be laughed at for our pains, at least there should be an uniform system throughout the country.

I am, Gentlemen,
Your obedient servant,
ROBERT CARTWRIGHT.

Shrewsbury, July 14, 1842.

MEDICAL DEPUTIES.

At the late elections in France, three medical men were elected members of the Chamber of Deputies—viz., M. Bouillaud, of la Charité, M. Dezeimeris, the Librarian of the Faculty of Medicine, and M. Terme, Mayor of Lyons.

M. LIEBIG.

This distinguished chemist has been elected corresponding member of the Academy of Sciences, in the section of chemistry.

COLLEGE OF SURGEONS.

At a council of the Royal College of Surgeons, on Thursday, the 14th instant, Anthony White, Esq., was elected president, and John Goldwyer Andrews, Esq., and Sir Benjamin Collins Brodie, Bart., were elected vice-presidents of the College for the ensuing year.

RETROSPECT OF THE MEDICAL SCIENCES.

CANCER OF THE LUNG AND MEDIASTINUM.

When Dr. Stokes published his work on the Diseases of the Chest, in 1837, he divided cancerous disease of the lung into two varieties; in the first the organ becoming degenerated, and transformed into a cancerous mass, without the production of any tumor; in the other, the scirrhous or encephaloid matter forming a tumor, at first external to and ultimately displacing the lung. The diagnosis in either case was then a matter of exceeding difficulty, the symptoms being obscure and the physical signs being merely those of solidity, more or less extensive. In the second case the physical condition of the parts is different; there is a mass producing compression, displacement, and obliteration of organs, together with all the physical signs of an intra-thoracic tumor.

Dr. Stokes has more recently published a communication in the "Dublin Medical Journal," containing a series of highly interesting cases, drawn partly from his own practice and partly from that of his contemporaries, illustrative of the diagnosis of this class of diseases. The forms of cancer met with are as follow:—1st, isolated and generally well-defined encephaloid tubercles of a rounded form, the intervening tissue healthy, and the tumors equally distributed through both lungs; 2nd, isolated masses of irregular forms, sometimes coinciding with a mass of complete cancerous degeneration; 3rd, tubercles of various species of cancer co-existing, such as scirrhous, the encephaloid, and the black spongiform cancer; 4th, simple degeneration of the whole or part of a lung into the homogeneous encephaloid matter; 5th, encephaloid tumors of the posterior mediastinum compressing the lung; 6th, the same condition combined with cancerous degeneration, and cancerous tumors of the lung itself; 7th, cancerous tumor of the anterior mediastinum; 8th, tumors of fluid, white, cancerous matter perfectly encysted, and surrounding the trachea and œsophagus, combined with a white cancerous infiltration of a portion of the lung and cancerous coagula of the bronchial tubes; 9th, cancerous degeneration of the whole lung, with deep-seated and superficial ulcerous action, extensively separating the lung from the pulmonary pleura. Some of these forms of cancer have been found combined with other diseases, such as homogeneous cancer of the lung with empyema, cancerous tumor of the posterior mediastinum with pulmonary gangrene, cancer of the mediastinum and lung in combination with dilated tubes, and cancerous tubercles of the lung with bronchitis.

Cancer of the lung may be a primary affection, or may succeed to cancer of some of the external parts; facts are wanting to determine the comparative frequency of the two cases. Its most common form seems to be the degeneration of a portion of the lung into homogeneous encephaloid matter, and in that of isolated tubercles, which, if the patient lives long enough, may, Dr. Stokes thinks, increase so as to form a vast mass of cancer, not quite homogeneous, but presenting a congeries of very large tumors, touching each other, and compressing the intervening lung.

The diagnosis of pulmonary cancer is still attended with great difficulty. In many cases of cancerous tubercle, we are deprived of some valuable sources of physical diagnosis. The signs of irritation, for instance, so important in ordinary tubercle, are often not available; for, although great quantities of cancerous masses exist, the intervening tissue may preserve a singularly healthy condition. The signs of ulceration again, so valuable in phthisis, are wanting, and the test of comparison is often inapplicable, from the nearly equal distribution of the diseased growth over the whole of both lungs, so that it is possible that a large amount of disease may be present, and the sound on percussion be everywhere equal, and not dull. The chief assistance in diagnosis of cancerous tubercle will be the presence of bronchitis coming on without any apparent cause; at first amenable to treatment, but speedily returning, each relapse being more persistent, till at last a severe bronchitis is established, resisting all means of treatment, and terminating in the patient's death. The physical signs will be those of acute tubercle, unattended with other symptoms of acute phthisis, such as extensive but incomplete dulness of the chest with the symptoms and signs of bronchitis, the stethoscope showing that the lung is still permeable, the solidity only occurring in points. If with this we have evidence of cancer in any other situation, we may pronounce with considerable confidence that the patient labors under cancer of the lung, presenting itself in isolated tubercles, and equally distributed throughout the organ. In simple cancerous degeneration of the lung, the principal physical signs are, the gradual diminution of the vesicular murmur, without râle; its ultimate extinction, and the signs of perfect consolidation, the evidence of the latter state being better found in this disease than in any other pulmonary affection. This form may exist either simply or in combination with empyema, and may be secondary to cancerous tumors of the mediastinum. The sides of the chest may be symmetrical, dilated, or contracted, and the mediastinum may be displaced, although the side be contracted, in which case we have the signs of perfect consolidation, accompanied by imperfect pectoriloquism, and increased vibration to the hand. The mediastinum may be displaced and the liver depressed, without protrusion of the intercostal spaces; the heart may be found compressed and dislocated. The absence of the signs of ulceration is very characteristic.

Cancerous tumors of the mediastinum generally coexist either with degeneration of the lung or isolated tubercles in its substance, or they may be accompanied by pulmonary cancerous infiltration, or the deposit of cancer in the bronchial tubes. They may be solid or fluid, and are recognised more by the signs of the tumor than by those of disease of the lung. They may cause dysphagia, tracheal stridor, feebleness of one pulse, difference of respiratory murmur from pressure on the bronchial tube, displacement of the diaphragm, and dilatation of the heart; in the advanced periods of the disease, as in aneurism, gangrene of a portion of the lung may supervene, which is explained by Mr. M'Donnell, by the pressure on some part of the main bronchus arresting the circulation in the nutritive arteries. The tumor may exhibit pulmonary

pulsation with or without bellows murmur, but it is not always an attendant symptom; the feebleness of the pulsation, connected with the extent of dulness, assisting in distinguishing the disease from aneurism.

The following symptoms are important, as indicative of this disease:—Pain of a continued kind; a varicose state of the veins in the neck, thorax, and abdomen; œdema of one extremity; rapid formation of external tumors of a cancerous character; expectoration similar in appearance to currant jelly; and resistance of symptoms to ordinary treatment. Though none of the physical signs of this disease are, separately considered, peculiar to it, their combinations and modes of succession are not seen in any other affection of the lungs, and, finally, in cases where the phenomena in their nature or combinations are different from those of pneumonia, tubercle, pleurisy, and pulmonary apoplexy, we have good reason to suspect the existence of cancer. By these means, Dr. Stokes was enabled, in a very interesting case of encephaloid degeneration of the right lung, occurring in the person of a man, forty-four years of age, to pronounce at the first that he labored under malignant disease of the right lung together with empyema, and that he could not recover. His diagnosis was verified to the letter.

TANNIN, AN ANTIDOTE FOR STRYCHNIA.

Dr. Lüdicke attended a woman, thirty-seven years old, who had for a long time suffered from wandering pain and great tenderness in the course of the transverse and descending colon. Opium and other remedies having failed in affording relief, Dr. Lüdicke ordered 1-24th of a grain of nitrate of strychnia to be taken every hour. The patient, however, increased the dose so as to take half a grain in six hours, when she was suddenly seized with vertigo, and fell down insensible. A quarter of an hour afterwards she complained, though speaking with great difficulty, of having had a sensation as though her spine was being bent backwards, which had then passed off, leaving pain in the back, and tremor of the hands. The respiration was difficult, the pulse feeble and frequent, and the patient had a sensation of nausea, with giddiness, whenever she attempted to sit upright, and occasional vomiting. Ice was applied to the head, and half a grain of tannic acid was given every hour, at first in an effervescing mixture, on account of the sickness, afterwards in distilled water. After twelve grains had been taken, a decoction of oak bark was substituted for it, combined with syrup of cinnamon and sulphuric æther. The symptoms of poisoning all disappeared under this treatment.—*Medicinische Zeitung.*

CLOSURE OF THE OS UTERI.

Mr. Pugh, surgeon, of Salem, was consulted by a patient, apparently suffering from an attack of dysmenorrhœa. It appeared that she had been confined about two years previously, parturition having been followed by inflammation of the neck of the womb. The lochia did not appear. Since that time neither the catamenia nor any other uterine secretion had taken place; she always suffered from severe pain at the menstrual period, and occasionally had vicarious discharges from the anus or lungs. As the usual remedies failed in affording relief, the symptoms were becoming alarming, and the abdomen was evidently enlarged; Mr. Pugh decided on puncturing the uterus, which was done in the following manner:—A middle-sized scalpel, wrapped round with fine calico, was introduced upon the index finger of the right hand to the indentation left by the closure of the os tincæ, and the point was then gently forced through the coats of the organ; about two pints of fluid immediately escaped, and this was attended with considerable relief; in the course of the next twelve hours two pints more flowed away. A gum catheter was then introduced, which remained in until the wound was healed, and the orifice formed. The patient recovered her health rapidly, and has continued well, except a mild attack of leucorrhœa. Menstruation has been quite regular ever since.—*Maryland Medical and Surgical Journal.*

CAUSES OF PARAPLEGIA.

Mr. Athol Johnson, in a paper read before the Medical and Surgical Society of St. George's Hospital, gives the following as causes of paraplegia:—1st, from disease of the vertebræ; 2nd, from injury of the vertebræ or cord; and, 3rd, from other causes—this latter being subdivided into functional and organic. The functional are, 1st, over-excitement of the nervous system, as in the case of professional persons, or those obliged to use great mental exertion; 2nd, inflammation of the membranes of the spinal cord; 3rd, a peculiar state of the nervous system, constituting one of the forms of hysteria—hysterical paraplegia; 4th, great draughts upon the nervous system, such as excessive venery, indulgence to a great extent in ardent spirits, &c. The organic causes are, 1st, effusion of fluid into the theca vertebralis; 2nd, disease of the spinal cord or its membranes, as ramollissement, tumors, &c.; 3rd, disease in the encephalon; 4th, disease of the brain and spinal cord. To these Mr. Johnson adds an instance of paraplegia, in which the cause could not be discovered by dissection. His paper is illustrated by a series of cases, chiefly derived from hospital practice.—*Medico-Chirurgical Review.*

THE MENSTRUAL SECRETION.

M. Brierre de Boismont has published a work, from which the following statistical account of the catamenia is taken:—His inquiries were conducted among 1,200 women of different classes of society. *The First Appearance of the Menses:* Of 276 women living in the country, the mean age was 14 years 10 months; of 205 living in towns, 14 years 9 months; and of 359 either born in Paris or who had lived there at least a year prior to menstruating, the mean age was as follows—namely, in 171 poor women, 14 years 10 months, which agrees with the statements of MM. Marc, Despine, and Bouchacourt; in 135 of the middle classes, 14 years 5 months; in 32 girls in Bouvier's orthopedic establishment, 14 years 8 months; and in 53 of the highest ranks, 13 years 7 months. Chomel, Andral, and Recamier fix the age for commencing menstruation among the upper classes at between 12 and 14. The average age obtained by the union of 359 of all classes in the capital is 14 years 6 months. Marc d'Espine places the mean figure in Paris at 14.965; at Manchester it is 15.191; and at Marseilles and Toulon, 14.015. Climate, position in society, nature of occupation, customs, manners and habits, education, &c., all exert more or less influence on the date of commencement of this secretion. Temperament also possesses a marked power; they may be arranged in

the following manner, beginning with that in which menstruation appears earliest:—Sanguine, lymphatico-sanguine, lymphatico-nervous, and lymphatic. A robust state of the constitution favors the appearance of the menses, a delicate one retards it. Of 645 women, 357 commenced menstruating without, and 288 with, more or less serious premonitory suffering.

Of 562 women the period of duration was as follows:—in 772, eight days; in 119, three days; in 78, four days; in 62, two days; in 46, five days; in 35, one day; in 21, six days; in 12, seven days; in 17, above 9 days. The menses lasted long, especially among the inhabitants of towns, delicate nervous women, and such as led indolent, voluptuous lives. Of 25 women who were irregular previous to marriage, 14 became regular.

In 181 women, very different epochs for the cessation of this secretion were observed. Cessation becomes frequent towards 40, and then to 50 very common. The entire duration of the menstrual life varies from 5 to 48 years, the mean period being from 27 to 28 years. Of 154 women, all symptoms or ill effects from the cessation at once disappeared in 40; in 80, they had a mean duration of two years; in 12, the period was not precisely marked; and in 22, the symptoms still continued. Metrorrhagia followed in 57 cases. This is not to be feared when moderate, as it occasions very slight debility; it is dangerous only when it indicates organic disease.

LEUCORRHŒA.

Observations respecting leucorrhœa were made by M. de Boismont in 273 cases. Of these, 63 had leucorrhœa prior to the first menstruation, and several found it cease just prior to or during the first epoch. Two-thirds of these were born in Paris, and of fair complexion, and the most of those who resided in the country were of strumous habit, but some were healthy. In 248 women, leucorrhœa showed itself at a varying date after the first menstruation; and in some, in whom it had existed prior to menstruation, it became increased. In 155, the leucorrhœa appeared just before the menses, was masked by the secretion, and reappeared when it had ceased. In 225 women out of 248, the leucorrhœa returned after menstruation had ceased. When leucorrhœa exists prior to menstruation, it retards it more than any other cause, and frequently in these subjects the menses do not appear until eighteen or nineteen. It is often complicated with chlorosis and a delicate constitution. Marriage more frequently increases than diminishes leucorrhœa, but in many cases it does not produce any effect. It is very common after delivery, and especially after abortion. It is common in young girls, who are liable to irregular menstruation when they come to live in towns; in amenorrhœa it is very frequent, and would seem, in some measure, to supply the defective secretion.—*Brierre de Boismont on Menstruation.*

PHTHISIS—EMPHYSEMA.

Dr. Corrigan brought under the notice of the Pathological Society of Dublin a case of complication of emphysema with phthisis. Both lungs were emphysematous, and of enormous size, notwithstanding the collapse which follows death, and they presented a very remarkable appearance when the chest was opened. Another feature in the case was the existence of sub-pleural vesicles of very large size, and in considerable number. There was an old and large tubercular cavity in the apex of each lung. The only portion of the organ which appeared to be sound was the posterior part of the right lung, extending from the angle of the scapula downwards. The chief points worthy of notice were, that the case presented in a very remarkable manner, some of the symptoms of emphysema, so accurately described by Dr. Stokes, such as the everted and puffed lip, the dilated nostril, and the characteristic shape of the chest. The signs of a pulmonic cavity were masked, which Dr. Corrigan explains by stating that it had undergone a process of cure, and besides, was surrounded by emphysematous lung, which is a bad conductor of sound. The physical sign, frottement, stated by Laennec to occur in cases where sub-pleural vesicles exist, was not found in this case, although the vesicles were both large and numerous.—*Dublin Journal of Medical Sciences.*

MUSCULAR FIBRE OF THE HEART AND GULLET.

The following is an abstract of a paper on the muscular fibre of the heart and gullet, written by Mr. Gulliver, and read before the Zoological Society. In many mammalia, as the insectivorous feræ, ursidæ, mustelidæ, ruminantia, rodentia, &c., the muscular fibre of animal life runs along or forms a complete investment to the entire length of the œsophagus, and sometimes extends a short distance on the cardiac extremity of the stomach. In man, the quadrumana, viverridæ, felidæ, the porpoise, horse, &c., it terminates on the œsophagus at a greater or minor distance, before it reaches the stomach. In birds and reptiles the œsophagus has not any covering of the muscular fibre of animal life, while in fishes it frequently extends along the whole length of the œsophagus and on the cardiac extremity of the stomach. The assertion, therefore, of Professor Müller, that "the third act of deglutition is perfectly involuntary, being performed by the muscular fibres of the œsophagus, which are not in the slightest degree capable of voluntary motion," though applicable to a few animals, is by no means true of others, such as those first mentioned.

In the heart of the mammalia, the primitive muscular fasciculi, as is well known, in many respects resemble the muscular fibre of animal life. But this resemblance ceases, according to Mr. Gulliver's observations, in the lower vertebrate animals, since in the hearts of these the fasciculi are less obvious, the transverse striæ and the minute beaded fibrils are absent, the whole structure being made up of bands or fillets, generally from 1-5300ths to 1-2600ths of an inch in diameter. In short, the minute structure of the heart in reptiles and fishes has not, as in mammalia, any resemblance to the muscular fibre of animal life, but is more like the muscular fibre of the coats of the intestines or the elastic tissue. The existence of a sarcolemma or sheath round the muscular fasciculi of the heart even of mammalia is doubtful; the fillets or bands in the heart of the lower vertebratæ have no apparent sheath; and the muscular fibres of the heart in mammalia are not connected together by any visible cellular (filamentous) tissue.

In some of the voluntary muscles of many animals the primitive fibrils are distinct enough, although the muscular fasciculi and the transverse striæ are either

very delicate, indefinite, obscure, or invisible, and the sarcolemma cannot be shown. The great pectoral muscle of birds, as of the common swift, for example, may be compared with other muscles of the same bird; and some muscles of mammalia, as of the common mouse, have very indistinct fasciculi and transverse striæ.—*Lancet.*

EFFECTS OF INTERMENT IN CITIES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In the reference made to my evidence before the Parliamentary Committee on Burials in Towns, in the leading article of your last number, you do not state the whole truth.

In common with the other witnesses, I objected to the continuance of the practice of burying in towns, more especially in confined and crowded districts of them. I expressed my belief, that that practice was injurious to the public health in a moral as well as in a physical point of view. But I also said, that I thought much exaggerated statement had gone abroad upon this subject; and, as it appears to me, this is the more to be regretted, because it diverts attention from an evil, certainly of equal, if not of greater, magnitude —namely, the crowded, close, ill-ventilated, filthy courts and alleys which exist in the neighbourhood of many churchyards in London. The ill-constructed habitations of the poor in these districts, crowded as they are by a dense population, indifferent to cleanliness, ill-fed, and badly clad, are, in my judgment, infinitely more fruitful sources of disease than graveyards, even with all their abominations, as detailed to the committee.

It was asked me, Did I believe that the emanations from decaying animal matter gave rise to typhus fever? To this I replied decidedly in the negative. And I shall at present content myself with stating my conviction, that if the great mass of medical evidence accumulated on this subject prove anything; it proves that the ordinary source of typhus is to be found in the *infected bodies of the living*, and that the symptoms occasioned in certain cases by exposure to the gaseous emanation from graveyards are very different from those of typhus fever.

I am, Gentlemen,

Your obedient servant,

R. B. TODD.

26, Parliament-street,
July 20, 1842.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, July 15, 1842.

R. Niblett, R. Cooper, H. D. Fowler, J. Hutchison, E. T. D. Harrison, J. Campbell, P. Mackey, W. Watt, A. Cox, J. A. Powell, C. N. Wilkinson.

Monday, July 18, 1842.

T. P. Loinsworth, R. Dinham, R. Smyth, W. Bennett, H. O. Hawthorn, J. A. Palin, R. Greenhalgh, C. P. Fitzgerald, G. I. Willes, J. U. Easson, C. Coffey.

Wednesday, July 20, 1842.

G. T. Jones, J. R. Oliver, C. B. Boast, T. W. Cowell, T. S. Butler, H. Speer, H. Allen, S. H. Cooke, R. Hodgson, H. Callaway.

APOTHECARIES' HALL.

Licentiates admitted Thursday, July 14, 1842.

L. W. Moore, Norwich; J. Gay, Swindon, Wiltshire; T. S. Eyre, Army; T. C. Leah, Manchester; G. Johnson, Gondhurst, Kent; J. S. Collins, Leominster, Herefordshire.

BOOKS RECEIVED.

Commentaries on some Doctrines of a Dangerous Tendency in Medicine, and on the General Principles of Safe Practice. By Sir Alexander Crichton, M.D., London: Churchill, 1842. 8vo. pp. 283.

Hastings, considered as a Resort for Invalids. By James Mackness, M.D. London: Churchill, 1842. 8vo. pp. 151.

A Practical Treatise on Diseases of the Scalp. By John E. Erichsen. London: Churchill, 1842. 8vo. pp. 192.

Deformities of the Spine and Chest successfully Treated by Exercise alone. By C. H. R. Harrison. London: Churchill, 1842. 8vo. pp. 164.

A Case of Carcinomatous Stricture of the Rectum, in which the Descending Colon was Opened in the Loin. By Alfred Jukes. London: Churchill, 1842. 4to. pp. 24.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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TO CORRESPONDENTS.

The communications of *Mr. Soden, Mr. Edwards, Dr. Dyke, Mr. Hawkins,* and *Dr. Jeffreys,* next week.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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TWO FATAL CASES OF LARYNGISMUS STRIDULUS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I beg to forward to you two cases of laryngismus stridulus for insertion in your valuable periodical,

Your obedient servant,
Frederick Ryland.

Birmingham, July 23, 1842.

Case I.—William ——, residing in an elevated part of Birmingham, had been, from the period of birth, a fine and apparently healthy child; he was suckled entirely for the first three months, and afterwards had the breast three times a day. About the end of December, 1838, at which time he was six months' old, the boy's bowels became habitually costive; to obviate which, besides giving purgatives, many changes were made in his diet, but still costiveness prevailed. His appearance became unhealthy; his flesh soft; he was restless at night; had occasional severe fits of crying; and his thumbs were constantly drawn towards the palms of the hands. The gums were lanced, and calomel and jalap were given to act freely on the bowels, with considerable benefit to the little patient.

During the second week in January, 1839, he was observed occasionally to make a croupy noise in breathing, and this occurrence became more frequent and more remarkable till the 18th, when he had two or three fits of laryngismus, so severe that his respiration was for a time suspended, his eyes fixed, and his countenance quite purple, and minor attacks took place many times in an hour, especially if he was thwarted or vexed in any way. Lancing the gums and calomel again diminished both the force and frequency of the attacks, but in a few days they became as bad as before. It was determined, in consultation with Dr. Evans, on the 23rd, to lance the gums again very freely, to put a blister at the back of the neck, and to give an alkaline mixture with extract of bark. On the 24th he had a fit of laryngismus, accompanied by tetanic rigidity of the muscles of the neck and back, which lasted many minutes, and was ultimately relieved by a warm bath. All the day previous to this seizure, and in a very short time afterwards, the lad was as playful as possible, laughing and crowing quite merrily. For the last few nights he had slept well, and his general health appeared to be improving. I noticed, however, that he was very easily startled; his heart could generally be felt beating quickly; his thumbs were constantly drawn in, and sometimes his fingers became firmly flexed, and the backs of his hands and the tops of his feet swelled greatly. On the 25th he had another fit of spasmodic rigidity, like that of the preceding day. He was now removed into the country, as a permanent residence for the present, and the change was productive of great improvement to the patient. For many days he had only three or four slight attacks of spasm of the glottis in the course of the day and night, and none affecting any of the other muscles of the body.

In the evening of the 2nd of February, Willie became restless and generally unwell; and on the 3rd, when I saw him, the countenance was anxious, the head hot, and the bowels confined; the hands and feet were also much contracted. I directed purgative medicine, constant sponging of the head with tepid water, and a diminution in the quantity of food. On the 4th he seemed in no respect relieved; he had passed a most disturbed night; the bowels had acted four times, and the motions were apparently healthy; but the languid countenance, the heavy, aching head, and the raised fontanelle, indicated a more than usual implication of the cerebral organisation. The carpo-pedal contractions continued, and the laryngeal spasms had returned, but were in no instance so severe as they had been formerly. More purgative medicine was ordered, and the head was bathed with spirit lotion. About half-past ten on the morning of the 5th, I received a hurried entreaty to go and see little Willie directly, as he was in a fit. I went without delay, but he was quite dead when I reached the house. I found, upon inquiry, that he had passed a restless night, that he had in the morning many fits of croupy breathing, and that just as the servant was about to take him a walk, he had a violent seizure of the usual kind, but more frightful, becoming not only purple in the face, but discolored all over the body. He was almost instantly put into a warm bath; cold water was thrown in his face, and all the accustomed remedies were tried, but, in the opinion of an intelligent lady who was present, he had ceased to live within a minute after the commencement of the attack.

An examination was made of the body forty-five hours after death. The veins about the head and neck were distended by dark fluid blood. There was a considerable deposition of serum within the membranes external to the brain, and the convolutions were much separated from each other by this effusion. No milkiness of the arachnoid; the veins of the meninges were distended with blood. The brain itself was quite healthy, and the ventricles contained rather more fluid than ordinary, but not much. In the membrane at the base of the brain, Dr. Evans, who did me the favour to assist me in the examination, discovered four or five semi-transparent bodies of the size of millet seeds, which he thought were tubercles. On opening the chest the thymus appeared large; it was not measured, but its weight was nine drachms

and a half. It was in contact posteriorly with the innominata vein, the trachea, and the pericardium. It was of a pinkish color, and contained much milky fluid. Neither before death nor afterwards could we detect any enlarged glands in the neck. The nervus vagus and the recurrent appeared to be quite normal.

Case II.—Henry ——, brother of the preceding child, was born in September, 1840, and completed the fourteenth month of his life without suffering from spasm of the glottis, or, in fact, from any disease, except a severe diarrhœa, when he was nearly a year old, which reduced him greatly at the time. In the first week of December, 1841, the little patient began to experience occasional fits of laryngismus; their exciting causes were sleep, bodily exertion, mental emotion, attended either by laughing or crying, drinking cold water rapidly, and coughing or sneezing, mental distress producing the most violent attacks. The seizures consisted in an incapability of filling the chest with air, which lasted but for a short time, and was attended, in slight attacks, by a kind of catching at the breath, and, in severe cases, by loud croup-like inspiration, blueness round the mouth, and great terror on the part of the child. His state of health, since the diarrhœa mentioned above, had been excellent; he had the eight incisor teeth, and the two upper bicuspids. There was no appearance of cerebral excitement, no carpo-pedal contractions, no elevation of the fontanelle, which remained rather open. A slight mucous rattle in the trachea was often heard previous to the coming on of the attacks, and if a little mucus was coughed up at once, no spasm ensued. The bowels were in a natural state, except that the motions were light colored. The weather during the month of December was generally foggy and wet, and I repeatedly had occasion to remark that the state of the atmosphere influenced the disease to a surprising degree, for, when the day was bright and dry, the laryngeal spasms were very infrequent, and the contrary when the weather was rainy and damp. The child was kept pretty closely to the house; he had a plentiful milk diet, a grain of calomel every morning, and a warm bath every evening. An emetic of ipecacuanha was sometimes given when the mucous rattle was unusually prevalent, and it had the effect of keeping off the attacks for some hours after it had been administered. The gums over the lower bicuspids were divided from time to time. In the course of a few days he began to take eight grains of carbonate of iron and two grains of rhubarb three times a-day, discontinuing the calomel in the morning.

These remedial measures were productive of considerable benefit; the spasmodic seizures were greatly diminished both in frequency and in severity towards the end of December. The attacks seldom occurred oftener than four times in the twenty-four hours; they were unattended by blueness round the mouth, and amounted, in fact, only to hard breathing, without even temporary suspension of the respiration. One of the bicuspids appeared on the 15th.

In the beginning of January, 1842, the attacks of laryngismus, which had entirely ceased for two or three days, recurred, and were rather severe once or twice a-day; the patient had also that peculiar frown that has been noticed in these cases, and sometimes contraction of the toes for a short time in one or both feet. His appetite and spirits were good; bowels regular. The fourth bicuspid appeared fully on the 2nd, and for one day the boy seemed quite well, and had no croupy attacks; but on the three subsequent days the seizures, though not numerous, were very severe in character. He continued to take the carbonate of iron and rhubarb, with the addition of half a grain of musk three times a day, and afterwards quinine in grain doses, but none of the medicines seemed to have profited the little patient much. On the 6th he took one-eighth of a drop of croton oil in sugar, which produced one large liquid motion, besides inducing vomiting; the consequence appeared to be the cessation of the attacks, for none occurred all the day, though the weather was excessively wet. The medicine was repeated on several ensuing mornings, but it invariably brought on vomiting, and did not act on the bowels; it was tried in larger doses and in other vehicles, and was at last abandoned, because it was so unmanageable and so uncertain in its effects. However, when the croton oil acted powerfully on the bowels, the laryngeal spasms were greatly controlled, but, under other circumstances, it seemed to be of no service. His nights were more tranquil, and his countenance improved with the use of this medicine, and he desired to be on his feet more than he had latterly done. Castor oil and scammony and calomel were given daily, to induce strong purgative effects, and the tonics were discontinued, and on the 12th he was removed into the country (to Edgbarton). These measures answered so well, that he had only one slight attack between the 10th and the 19th, his appetite and spirits continuing good all the time.

Jan. 20. Yesterday morning Henry was suddenly and without apparent cause seized with a kind of fit, in which he became at first rigid, without any convulsive movements; he had frothing at the mouth, with lividity and bloated countenance; afterwards he became pale and exhausted, the whole time of the fit being two or three minutes. During the remainder of the day he had very many croup-like attacks, accompanied by mucous rattle in the larger air-tubes. He was removed into Birmingham. At six this morning and at noon, attacks similar to that of yesterday took place; they consisted of spasm of the muscles of the larynx, rigidity of the trunk and extremities, carpo-pedal contractions, squinting, and involuntary fæcal evacuations, followed by great exhaustion and ultimately by sleep. The little fellow is lively at times, and always intelligent; his appetite is good; skin warm and moist; pulse rather feeble, and about 96; fontanelle always depressed. For the last two days he has suffered from cough, hoarseness, and other signs of cold.

His bowels had acted well every day, his diet had been properly regulated, his teeth had not seemed to trouble him, and I could, therefore, only attribute this severe recurrence and extension of the disease to a cold which he had caught in an unfortunate walk, when, though fine at first, the weather had become foggy and drizzling before his return. He took large doses of valerian powder with oxymel scillæ and ipecacuanha; the gums over the canine teeth were lanced, and a blister was put on the back of the neck. He

went on well till the 25th, having many attacks of laryngismus during each day, but not very severe. During the 25th the boy showed a constant disposition to squint, and the fits of laryngeal spasm were numerous, and sufficiently bad to cause blueness of the face during their continuance and great exhaustion afterwards. Between eleven and twelve at night he had another fit of tetanic rigidity, with suspension of respiration and involuntary evacuations, the proximate cause being vexation. The laryngeal spasms were many and severe during the following day, and in the intervals between them the poor lad had a tendency to squint, and a sardonic smile on the countenance. He was pale and exhausted, the fontanelles much depressed, cough troublesome. At this time I gave him the oxyde of zinc with musk and ipecacuanha three times a day, and at first he seemed to derive benefit from these medicines, but his state was exceedingly variable; sometimes for a day or two he was almost free from croup-like attacks, and then without any appreciable cause they would return severely.

Feb. 6. Henry has had many attacks to-day, and two of them of a most fearful character. One, the slighter of the two, I happened to witness. It commenced like an ordinary fit of laryngismus, but the constriction of the larynx, not complete at first, became more so every instant, till respiration was entirely suspended. The child then presented the most horrible appearance: the eyes were fixed and distorted; the mouth open, and thick saliva running from it; the face became at first flushed, then of a dark blue color, whilst the lips were of the deepest violet; the trunk and limbs were at the same time rigid. Respiration returned gradually, the blueness and turgescence of the face subsided, and sleep fell upon the poor little fellow almost immediately, and he continued asleep for a long time afterwards. The cause of this attack was a change of nurse that was effected against his will.

14. The patient has had no very bad attack since the 6th, but his general health is bad; he sleeps badly at night; sweats profusely on slight exertion; is thirsty; appetite good only at dinner-time; bowels open; his cough is troublesome, and often brings on the croup-like seizures.

20. Henry's attacks are decidedly worse; all the bad ones, of which several occur in the day and night, being attended with rigidity of the body and complete blueness of the face; they come on, moreover, now without any apparent exciting cause. The fontanelle is generally depressed; the head perspires freely; the cough is better; but all the fits of spasm of the glottis are accompanied by the rattle of mucus in the larger bronchial tubes. He is now again in the country, and has been carried out for a short time in the middle of each day when the weather is mild and pleasant. The gums of the canine teeth have been well and frequently lanced, but the teeth have not appeared, nor does the lancing seem to exert any effect upon the number or violence of the attacks.

23. Much the same, except as to the cough, which has, I fear, been increased by going out; there is much mucous rattle, especially after the croup-like seizures; no hoarseness; no increased frequency of respiration; no pain in the chest. The boy's appetite is variable; he becomes evidently weaker.

24. For some time past the patient has frequently had spasm of the glottis on first attempting to drink any fluid, whether warm or cold; to-day, drinking appears very distasteful to the child, and, indeed, almost impossible. He wished to take some milk and water this morning, and a teaspoonful was put into his mouth repeatedly, but after keeping it there some time he returned it, from an inability to swallow it. The attacks during the past night and day have been more severe than ever. The fontanelle is greatly depressed; the extremities rather cold; the cheeks cool; he is restless, but disposed to sleep.

25. The patient died this morning about six o'clock in a severe attack of spasm of the glottis, brought on, as was supposed, by biting his tongue while eating a biscuit. During the night, however, previous to the fatal attack, he had had two fits, which yielded only to the warm bath. He had been talking and singing a few minutes before he died.

Post-mortem Examination Thirty-two Hours after Death.

The thymus was normal as to size and appearance; certainly it was not large in any direction. The lungs were emphysematous over the greater part of their external surface; internally they were healthy and only slightly congested. There was no fluid in the pleuræ. The veins about the neck were distended with dark fluid blood. The larynx, trachea, and larger bronchi were of a pale red color, from increased vascularity; the mucous membrane of the larynx was thickened as well as vascular. The rima was quite closed, this closure being the effect of muscular action, as it was readily opened by a probe, and remained open afterwards. The trachea and bronchi contained a large quantity of mucus. The glands about the arch of the aorta were enlarged and vascular; there were no glands about the subclavian artery where it is encircled by the right recurrent nerve. The recurrents were of natural size and appearance, and were not attached to, nor pressed upon by, any absorbent glands in any part of their course.

The head was next examined. The veins and sinuses of the membranes of the brain were distended with blood to an extent such as I never saw surpassed; and within the substance of the brain the same distension of the vessels existed. There was no fluid either beneath the membranes or within the ventricles, except at the base of the brain, where the quantity of fluid was perhaps rather more than natural; no milkiness of the arachnoid. The brain, cerebellum, and medulla oblongata were perfectly normal. No diseased appearance, in fact, existed within the cranium except the extreme turgidity of the vessels, which was undoubtedly owing to the last struggle.

REMARKS.

The proximate cause of death in both cases was the same—viz., suffocation from spasmodic closure of the rima glottidis and tetanic rigidity of the muscles concerned in carrying on the respiratory process. The exciting cause of the spasmodic action of the muscles of the larynx appears to have been in Case I. dentition complicated with head affection; the determination of the diseased action to certain muscles being attributable, I presume, to constitutional predisposition. The source of the disease was in the nervous centres; the exciting causes of the paroxysms, where any could

be made out, were, besides dental irritation, thwarting, vexation, or mental disturbance. The *excito-motory* theory, which has been so strongly insisted upon by Dr. Marshall Hall as explanatory of the phenomena of this disease, offers a reason for the peculiar excitability of the muscles of the larynx in the irritation of the dental branches of the fifth pair of nerves; it thus shows the *course* of the diseased action, but leaves us still in the dark as to the cause why a peculiar spasmodic action of the laryngeal muscles should take place in certain cases of dental irritation, whilst in other cases general convulsions, carpo-pedal contractions, or other well-known effects should arise from apparently similar circumstances.

The exciting cause of the spasmodic action of the muscles of the glottis in Case II. appears to have been inflammation of the larynx and bronchial tubes, together with dental irritation. The usual signs of head affection were absent both before and after death; the thymus was perfectly normal in appearance; the recurrent nerve was unimpeded in its action; the stomach and bowels were free from disease, and performed their functions properly. No other commonly accepted cause of the laryngeal spasm remains but bronchitis and dental irritation combined with hereditary predisposition. Lancing the gums was servicable only in the early stages of the complaint, therefore I am disposed to exclude dental irritation from the list of causes in the latter periods of the patient's life, and to ascribe the continuance of the disease to the catarrhal affection only. I need scarcely add, that Dr. M. Hall's theory, whilst it explains in the latter case as in the former the course of the disease, fails in pointing out its cause.

ON

BENZOIC ACID IN URINARY DISORDERS.

By John Smith Soden,

Surgeon to the United Hospital, Bath.

[Read at the Annual Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association.]

As the regulations of the district branch societies require that communications at these meetings should be chiefly of a practical nature, I shall merely call the attention of the members to a remedy that has been lately recommended for the relief of irritable bladder, and state my own experience of the efficacy of benzoic acid in cases of that description.

In the last volume of the Medico-Chirurgical Transactions, there is a paper by Mr. Ure on gouty concretions, in which he states that most unequivocal proofs have been afforded him of the efficacy of benzoic acid in correcting and removing certain disordered states of the urine in individuals prone to attacks of gravel. In the "Provincial Medical and Surgical Journal," of February 26, 1842, Dr. Walker, of Huddersfield, published an account of the advantage he had witnessed from the use of benzoic acid, combined with balsam of copaiba, in certain affections of the urinary organs. Dr. Walker's statements induced me to adopt his practice, and the first favorable opportunity of testing its efficacy occurred a few days after I had read Dr. Walker's paper, when I was summoned to an elderly gentleman who had long suffered from irritable bladder and enlarged prostate. Three years ago I saw this patient on account of retention of urine. I was then informed that, for a considerable time, he had had frequent inclination to pass urine, though able to void only a small quantity at each call, and that the urine was generally loaded with mucous secretion. I found enlargement of the prostate, but had no difficulty in passing a catheter; I emptied his bladder, and the urine drawn off contained a considerable quantity of muco-purulent deposit. The catheter was passed daily, and the bladder washed out with warm water; the hip-bath, with rest, and the means ordinarily adopted in such cases, soon mitigated the severity of this attack. The patient acquired the power of introducing the catheter himself, and has used the instrument, I believe, daily ever since that period. I occasionally felt the instrument strike against a calculus, but the state of the prostate, and advanced age of the individual, rendered an operation inadvisable. During the last three years he has taken most of the remedies generally recommended on such occasions, and thinks the uva ursi has been most serviceable to him. He had not, for a long time, been under the care of a medical man, but trusted entirely to his own management, till I was sent for in March last in consequence of aggravation of suffering. He showed me the urine he had recently passed and drawn off. It deposited a large quantity of muco-purulent discharge. He complained much of the irritability of the bladder. I injected warm water, and, as on former occasions, he had derived more benefit from the exhibition of uva ursi than from any other remedy, I prescribed that medicine, together with the use of the hip-bath, and a suitable regimen; as no material relief ensued at the end of three days, I directed the benzoic acid in the following form:—

> Benzoic acid, one drachm;
> Balsam of copaiba, half an ounce;
> Yolk of egg, enough to form a mixture with seven ounces of camphor mixture. Two tablespoonfuls to be taken thrice a-day.

I never witnessed anything equal to the efficacy of this medicine; the urine became clearer after the first dose, and in two days it was perfectly free from mucous deposit; the irritability of the bladder was lessened, and in four days the patient resumed his self-management. I did not feel the calculus during this attendance. The gentleman left Bath about six weeks after this period. I saw him a few days before his departure; he told me that he was as well as usual, that he continued to use the catheter, but that the urine was quite clear, and that when he observed any tendency to mucous deposit he had recourse to the mixture, and always with success.

The result of this case induced me to give the medicine a trial at the United Hospital, and our intelligent house surgeon, Mr. Morgan, has been kind enough to give me the heads of four cases in which it has been exhibited at that institution.

Case I.—A man, aged thirty-five, applied for admission as an out-patient, complaining of frequent desire to make water, which has existed for the last month; the urine deposits mucous sediment; the patient has no gonorrhœa, and refers his disorder to being much exposed to cold and wet. On passing a catheter the urethra was found perfectly natural, but

there was some slight hæmorrhage after the urine had been evacuated; has some pain in the loins; pulse rather strong; was at first cupped on the loins, and ordered aperients; and then diosma and the pareira brava, with opiates, were given in succession. After having attended for three weeks, he complained of some pain in the joints, for which he was ordered colchicum, and though it greatly relieved the rheumatic affection, produced no beneficial effect upon the state of the bladder. Mr. Soden saw him, and directed the mixture, with benzoic acid and balsam of copaiba. He found benefit after using it for two days, and in ten days was perfectly well.

Case II.—A married woman, apparently in good health, was admitted as an out-patient, stating that she had frequent desire to make water; the urine depositing on cooling (she says) a whitish sediment; urine slightly acid; she has been under medical treatment at intervals during the last six months, but without deriving any benefit from the means adopted. The mixture, with benzoic acid and balsam of copaiba, was ordered immediately, and she was discharged, cured, in three weeks.

Case III.—A man, aged fifty, has been under the care of two surgeons for a month, owing to having suffered from irritability of the bladder. Has now frequent desire to make water; a small quantity of blood is occasionally passed with the last drop of urine; some ropy mucus is deposited in the urine, which is slightly acid, though it very soon becomes ammoniacal on standing; there is some irritation at the glans penis; on sounding, no stone could be detected. He was ordered the benzoic acid mixture, but only continued his attendance for three visits (eight days), during which time great relief was afforded, and as he has not since applied at the hospital, he is most probably well.

Case IV.—A man, aged thirty-seven, after a severe attack of gonorrhœa, which appeared, by his description, to have been attended with acute inflammation of the bladder, was admitted an out-patient. He complains of being obliged to make water very frequently, having to get up six or eight times in the night to empty his bladder; has much pain in front of the pubis; some ropy mucus is deposited in the vessel, after the urine has been standing some time. After trying several other remedies without advantage, the benzoic acid mixture was ordered, from the use of which he experienced great relief in two or three days, and at the end of ten days no mucus was discovered in the urine.

The most remarkable circumstance connected with the exhibition of this medicine, as far as my experience goes, is its decided efficacy in diminishing, and, in some instances, completely suppressing the mucopurulent deposition in the urine, which is so prominent a symptom in most cases of affection of the bladder. I am aware that a doubt may be very fairly entertained whether this effect is to be attributed to the benzoic acid, or to the balsam of copaiba, or to their combination. In the few cases which I have just related I was induced to give both these medicines, from the advantage which had been derived from their use in Dr. Walker's practice. It is, however, very desirable to ascertain the effect of benzoic acid alone in similar cases, more particularly as balsam of copaiba so frequently disagrees with delicate stomachs. I shall therefore not fail to avail myself of future opportunities of trying it, uncombined with other active ingredients; and the hope of inducing my brethren of the Association to endeavour to establish the real worth of a remedy that promises to be serviceable in a very formidable and distressing class of complaints, has been my principal motive in occupying so much of the time of the meeting.

CASE OF OVARIAN TUMOR IMPEDING DELIVERY.

By Conway T. Edwards,
Surgeon to the Batheaston Lying-in-Society.

Towards the latter part of 1840, I attended a young unmarried woman for a tumor, which appeared to occupy the situation of the right ovary; its diameter was not more than an inch, and pressure upon it produced great pain. The symptoms then present were indicative of inflammatory action, and the treatment directed to subdue that action consisted in a large general bleeding, saline aperients with tartarised antimony, protochloride of mercury, and low diet.

This active antiphlogistic plan produced no abatement in the disease, although it was pursued for two weeks; an alterative course of mercury, combined with the extract of hyosciamus, conium, or belladonna, was then tried for a considerable period, with a similar result; and this was changed for that of iodine and its various preparations, but with no success. Nothing more was done until the month of February, 1841, when an inability to pass her urine compelled the patient to submit to having it drawn off with a catheter. I took away nearly a quart of high-colored water, and, examining the abdomen, found the tumor had enlarged, and advanced rather more towards the mesial line than when I made the first examination. The pressure which I used caused much pain, particularly about two inches below the umbilicus. The necessity of making a vaginal examination being pointed out, she reluctantly submitted, but nothing was discovered which could account for existing symptoms. Leeches were applied above the symphisis pubis, and an elastic catheter was passed twice a-day for a week. She now found her health so much improved as to enable her to undertake the duties of a servant.

She married in the month of August, and I saw no more of her until January, 1842, when, her original complaint having suddenly reappeared with great aggravation of symptoms, she sent for me again.

Conception had taken place. Her sufferings were now so great, and the relief experienced from my treatment so small, that I was anxious to have a second opinion on the case, and proposed that my friend, Wilson Brown, Esq., of the Bath United Hospital, should be called in. This was agreed to. After a minute examination, it was concluded that, although the disease was involved in great obscurity, we were justified in deeming it ovarian. The treatment proposed was, fomentations with warm water, the weekly application of leeches, support of the abdomen by a flannel bandage, gently aperient medicines, and a

light, nutritious diet. This plan was pursued with varying success until the 28th of June ultimo, when, being sent for in the middle of the night (the nurse having deemed labor to have come on), I made an examination, which gave great pain; but, not finding that any impression had been made on what I then thought to be the uterus, a dose of morphine was given, followed by castor oil. From that time until the 10th of the present month she was scarcely free from pains, which lancinated from the symphisis pubis to the lumbar region. I should here observe, that during conception I never had occasion to use the catheter.

On the morning of the 10th, unequivocal uterine action having come on, I made a very deliberate examination, with my whole hand in the vagina. First, my fingers came in contact with an elastic but not tense surface, which appeared to be attached high up towards the promontory of the sacrum, and continued downwards, forwards, and upwards, beyond the symphisis pubis. To the touch it conveyed the sensation which a placental presentation gives, when felt through the paries of the uterus. No os tincæ could be discovered towards the sacral region; so, passing my right hand forwards, I felt what appeared to me to be its lips (but undilated), about two inches above the symphisis pubis. During the examination there was one severe pain, but its power was expended on the sacral portion of the uterus. I gave her forty minims of laudanum; repeated my visit at seven, p.m., and made a second examination, which confirmed my opinion that the neck of the uterus was high above the symphisis pubis, and that a large fleshy tumor had been the cause of such a position, while a few heavy uterine pains were sufficient to assure me that unassisted nature could never effect delivery. I repeated the laudanum and oil, and left her.

On the morning of the 11th, a succession of pains caused the nurse to send for me. A third examination was made, and, as no improvement had taken place, I assembled the husband and a few of the woman's near relatives—explained the awful condition in which the patient was circumstanced—stated that, in my opinion, nothing but an operation, involving the life of the mother, could save that of the child; and, therefore, I was desirous, for the satisfaction of all parties, that Mr. Brown should be again called in. Assent being given, I wrote that gentleman a concise account of the existing state of things, and at twelve he kindly afforded me his valuable assistance.

His examination confirmed the truth of my opinion so far, that a large tumor had thrown the uterus out of its natural position, and that the os tincæ was far above the symphisis pubis—that the tumor was of an encysted nature, but what were its contained parts could not be determined on—that a bony growth, above the promontory of the sacrum, materially contracted the diameter of the pelvis, and that artificial delivery must be submitted to.

Having prepared the family and our patient not to expect too much from the operation, it was determined to open the tumor, and then act as circumstances would demand.

Mr. Brown now carried up Pott's bistoury, and after cutting through a very tough external coating, gave exit to a thick and glairy secretion, and masses of hair, mingled with sanguineo-purulent secretion. Being requested to examine the opening thus made, my hand entered with facility a large membranous sac, came in contact with what seemed to be a second membranous tumor, and then rested on a large bony growth, evidently arising from the summit of the promontory of the sacrum. The uterus had ascended high above the brim of the pelvis, and the os tincæ could be well made out, although far beyond the symphisis pubis. Thus was the uterus lying horizontally across the pelvis, with its fundus above the sacrum.

After a pause Mr. Brown carried up his hand, ruptured another sac, and a great discharge of matted hair and inodorous pus followed; his hand was now high in the pelvic cavity; he ruptured the membranes, withdrew it, and requested me to take his place. I ought to have observed that, previously to Mr Brown's visit, one drachm of tincture of opium had been given.

After a rest of some time, I passed my right hand upwards and forwards, succeeded in insinuating my fingers in the os uteri, and discovered a breech presentation; steadily, but with gentleness, dilating the uterus, my hand and wrist entered that viscus, and with great difficulty, partly owing to want of room and partly from the twisted position of the fœtus, I grasped a foot and drew it to the os externum, when Mr. Brown attached a tape to it; I then brought down the second foot, and heavy pains ensuing, the body of the fœtus, after great exertion on the part of Mr. Brown and myself, was extracted as far as the umbilicus. The greatest difficulty was now to be surmounted. After a few fruitless attempts to disengage the head, I went for the perforator, but before I returned, Mr. Brown succeeded in terminating the delivery. In ten minutes (hæmorrhage coming on) I introduced my hand into the uterus, and carrying it quite round the fundus of the placenta, caused the nurse to make pressure externally, when the uterus contracting, expelled both my hand and the placenta.

The uterus was closely contracted, yet, from the large size of the abdomen, presumptive evidence was afforded that other tumors existed besides those which had been opened.

The patient bore the several operations with great fortitude. The pulse was tolerably firm, and there was not more exhaustion than might be expected on the occasion. A cordial mixture was now exhibited, and, after remaining quiet for an hour, the woman was put to bed.

Six, p.m. Pulse sinking; vomiting of a brown fluid, with fæculent effluvium; severe lancinating pain from pubis to sacrum, with pains wandering over the abdomen. An oatmeal poultice to the latter.

Eight, p.m. A great discharge of purulent fluid. It was necessary to give stimuli to retain vitality.

12. Pains very severe. Muriate of morphia, three quarters of a grain.

Tuesday morning, six, a.m. Awoke from a confused sleep, with violent pains over the whole abdomen. Passed catheter, and drew away half a pint of high-coloured and very offensive urine. To have five

grains of calomel, with a draught composed of senna, salts, jalap, and scammony. Pulse very weak.

Eight, a.m. Pains increased; vomiting came on, and resisted every means that were used to allay it. Injections were administered, but the bowels would not act. I saw the patient several times in the course of the day; it became evident that she was beyond the reach of human aid.

At ten, p.m., I reapplied the catheter, and drew off a teacupful of urine; but after suffering great pain for three hours longer, she died.

I was very anxious to make a post-mortem examination of the body; but the wife having made the husband promise that it should not be done, in case of her death, it was refused me. This is greatly to be deplored, as we can form no satisfactory opinion as to the nature of the cysts, their number, attachments, or the various parts which were involved in the disease.

Diagnosis of deep-seated tumors, at all times difficult, was in the present instance peculiarly so. The quantity of hair, similar in every respect to that which grows on a calf's foot, gave to the touch a sensation more like that which the placenta affords, than fluid capable of being evacuated by an operation. Here every symptom was so obscure that the disease was more likely to be ovarian than any other; and although, when Mr. Brown, from his great experience, skill, and judgment, pronounced it to be an encysted tumor, he was not prepared to find its contents to be of such a complicated nature as they proved; for he observed, proviously to operating, "Should it prove hydatids, it is a lost case; but if a secretion, like gruel, there may be hope."

The question may now be asked, Why was not this tumor discovered at an earlier period (for it had evidently been in existence and increasing for eighteen months), and the contents evacuated with a trocar?" Had there been any evidence that such a tumor was making its way downwards when I first used the catheter, and Mr. Brown made an examination, it would have been done; but there was no evidence of anything of the sort; to all appearance the disease was high in the abdomen, and, therefore, an exploratory operation would have been unjustifiable.

From reasoning on the case, I am led to believe that the tumor or tumors were first formed above the promontory of the sacrum; that they were attached to the fundus and diaphragmatic paries of the uterus, where they increased in number and magnitude; as the disease received fresh impulse from conception, the cyst extended along the vaginal paries of the uterus, and was *continued* on to its neck.

That, as the contents of the uterus enlarged, the fundus was pressed strongly against the diseased promontory of the sacrum, so as to prevent any great flow of secretion from the upper into the lower cyst, but enough to cause the extension of the latter to the neck of the uterus; that, as the uterus put on its specific action, its fundus was lifted at intervals from its position, and afforded an opportunity for the contents of the superior cysts to gravitate towards the lower or inferior cyst; and the facility with which the discovery of a tumor was made after the first uterine pains had come on, together with the impossibility of doing so when I first used the catheter, and Mr. Brown made his examination, strengthen the probability that it was so.

I beg to offer my best thanks to Mr. Brown for the valuable assistance which in this, as in many other instances, he has afforded me, and particularly for the handsome manner in which he resigned his post (after having operated on the cyst), that I might make out the presentation, and act as circumstances should then require

Batheaston, Bath, July 18, 1842.

DISLOCATION OF THE HIP INTO THE ISCHIATIC NOTCH IN A CHILD.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I beg to forward the enclosed case for insertion in the "Provincial Medical Journal." I have been induced to do so by reading the review of Mr. Bransby Cooper's edition of Sir Astley Cooper's work on Dislocation's, &c., in the "British and Foreign Medical Review," for July, 1842.

The reviewer censures Mr. Cooper for taking no notice of a case of dislocation of the hip lately related in an American journal. My object in sending this case is to give you an opportunity of inserting it in your useful periodical. It occurred during the time I was a dresser to the late Mr. Henry Earle, at St. Bartholomew's Hospital; and, with a little trouble, I could obtain particulars of another case which occurred, and which I witnessed through the kindness of Mr. Eves, surgeon of this place. Unfortunately, Mr. E. does not recollect the age of the boy.

I remain, Gentlemen,
Your obedient servant,
CLEMENT J. HAWKINS,
Surgeon to the Cheltenham Dispensary.

Cheltenham, July 19, 1842.

A. B., aged seven and a half years, was admitted into St. Bartholomew's Hospital, April 30th, 1836, with an injury of the hip, which had taken place about an hour previously.

On examination, the left leg was found to be about an inch and a half shorter than the right, the knee bent across the opposite limb, the foot a very little turned inwards; when the boy was made to stand up, the leg remained much in the same state, the toes barely reaching the ground; the head of the femur can be felt resting near the great ischiatic notch; there is considerable power of flexion remaining, but the limb cannot be rotated outwards to any extent.

The accident was occasioned in the following way: — He was carrying another lad on his back, his foot slipping into a hole he fell forwards with his burthen.

The case was considered by all present to be one of dislocation of the head of the femur into the ischiatic notch.

The reduction was attempted by the house surgeon and dressers, but failed, owing to the difficulty of fixing the pelvis.

Mr. Skey was sent for, who dexterously reduced the luxation in the following manner:—The patient

was placed on a high table lying on his side; a jack-towel was placed between the scrotum and thigh (being twisted); it was firmly held by an assistant; a napkin was placed beneath this, and held by the house surgeon in such a direction as to prevent the bone pressing in the groin; extension was steadily kept up, from the ancle, by two assistants, Mr. Skey gently elevating and rotating the limb outwards. By these means the head of the bone quickly returned to its socket.

REMARKS.

This case occurred during the year I was a dresser to the late Mr. Henry Earle, at St. Bartholomew's Hospital. In a clinical lecture delivered at the time of the accident, Mr. Earle observed he had never himself met with a similar accident, but mentioned one which happened in the practice of an eminent provincial surgeon (Mr. Norman, of Bath, I think), the subject being only four years of age.

Some years since, through the kindness of my friend, Mr. Eves, of this town, I witnessed a well-marked instance of dislocation of the femur into the ischiatic notch, in a youth whose age I do not recollect, but I firmly believe he was not more than ten or eleven years of age.

In the case I have related some discussion took place as to the situation of the dislocated bone. Mr. Skey would not undertake to say that the head of the bone rested in the notch, but was rather inclined to think it rested close on its border; however, I think it corresponded well with the description given by Sir A. Cooper of the symptoms of dislocation into the ischiatic notch.

CASE OF AMPUTATION DURING SPREADING GANGRENE.

By Jonathan Toogood, Esq.

Senior Surgeon to the Bridgwater Infirmary.

I published a paper a short time since in the "Provincial Journal," on the propriety and safety of amputution during the progress of gangrene; and as another opportunity has been afforded me of witnessing the success of the practice, I beg to call the attention of the Association to the following case:—

Thomas Baddis, a stout youth of eighteen, was admitted in the Bridgwater Infirmary at an early hour on Sunday morning, on the 10th of this month, who had suffered severe injuries of both legs, from their having become entangled in the coils of a rope, attached to a steam-tug, which was towing a vessel up our river. There was a considerable lacerated wound of the right leg, which had completely divided the tendo Achillis; the calf of the left leg was entirely torn up, the muscles being separated from the bones, the fibula broken into several pieces, the posterior tibial artery and nerves divided. The hæmorrhage, which had been very profuse, still continued, and the poor boy was in a state of great exhaustion. As there appeared to be no chance of saving the left leg, amputation was proposed; but as the friends refused the operation, the vessels were secured, and the parts brought as well together as circumstances would permit. There was no further bleeding, and he gradually recovered from the state of collapse. In the evening he had great fever, restlessness, and pain; the foot was cold and becoming livid.

On the following day he continued much in the same state, but the coldness and lividity of the foot gradually increased.

On Tuesday morning the foot was found quite black, and the gangrene had spread to the calf, and was rapidly extending. His friends now consented to the removal of the limb, to which the patient had always been willing to consent. It was amputated as close to the knee-joint as possible, and it was remarked that he lost less blood than was ever observed at any operation which had been performed at the Infirmary. He soon became tranquil, and all the violent symptoms which a few hours before threatened speedy dissolution, rapidly subsided. On opening the stump at the usual time, the surface appeared sloughy, and this state extended to the integuments, particularly on the outside of the limb to nearly an inch above the incision, but the sloughs were not deep. They separated on the eighth day, leaving a clean surface, and the patient has been so steadily progressing towards recovery, as to leave no doubt of its being complete.

A crepitus could be readily distinguished about the foot and and ancle, but it did not extend to the wound.

Bridgwater, July 28, 1842.

CASE OF CARCINOMATOUS STRICTURE OF THE RECTUM,

IN WHICH M. AMUSSAT'S OPERATION WAS PERFORMED.

By Alfred Jukes, Esq.,

Surgeon to the General Hospital, Birmingham.

Sarah Pass, aged 30, a married woman, residing at Bromsgrove, Worcestershire, was admitted into the Birmingham General Hospital, May 6, 1842, under the care of Dr. Blakiston, suffering from symptoms of intestinal obstruction. Her frame is emaciated; she has an anxious, troubled expression, and her complexion is somewhat sallowed, though the cheeks retain freshness of color. She reports herself to be the mother of four children, the youngest of whom is fifteen months old. All her labors were quick and natural; during her second pregnancy she received a kick upon the belly from her husband when intoxicated, but no bad consequences followed it. Her bowels were tolerably regular until eight months ago, when she became the subject of obstinate constipation, succeeded by vomiting. These symptoms continued for a month (during a fortnight of which time she had no alvine evacuation whatever), and then subsided; she does not appear to have passed her evacuations with regularity since the attack,—her bowels not acting, at various periods, more than once in three or four days; about a month ago she had a return of urgent symptoms; her motions became sparing and infrequent, and for the last three weeks entirely suppressed, with the exception of a scanty evacuation, described as slimy, which was passed five days ago; she has

during this period experienced urgent desire to empty the bowels, but her attempts have been ineffectual; for the last week or more, she has suffered greatly from distension of the belly and vomiting, which latter symptom has been progressively increasing, and has caused her to refuse all food for the last three days, excepting a little tea and broth.

Present State.—Her features are pinched, she has no headache, and her intellect is clear; her breathing is quick, her pulse soft and tranquil, her skin cool, and her tongue whitish and moist; she has vomiting after food, the rejected fluid being mixed with ropy mucus, tinged with bile, and free from stercoraceous smell; her abdomen is as large as though it contained a gravid uterus at the full period of gestation; this distension is evidently owing to the dilated intestines, which from the thinness of the abdominal parietes can be seen convoluted beneath, and ploughing the surface of the belly with projections and furrows; the integument of the abdomen is corrugated, and marked by the silvery blue lines produced by distension in her pregnancies; both large and small bowels appear to be equally dilated, for both iliac regions as well as the lumbar spaces above the crest of the ilium are bulged out, whilst the convolutions of the small intestines in the middle and front may not only be seen, but moved, and even altered somewhat in shape, by a little manipulation; percussion yields tympanitic resonnance throughout, and no solid tumor can be felt above the pelvic brim, in consequence of the hand being buoyed off the deeper parts by the distended bowels. On examining the vagina and rectum, a firm, dense tumor is felt some three inches from the anus, on the left side of the recto-vaginal septum, extending upwards towards the left sacro iliac symphysis; this growth seems to be intimately connected with the uterus and rectum, and to have rendered the position of the uterus preternaturally oblique, by pushing its fundus forward, and inclining its cervix backwards into the hollow of the sacrum; the lower end of this tumor is thinned off, though rounded, whilst above it expands both in breadth and thickness, form a convex surface in the rectum; it moves with the uterus, as is proved by inserting the tip of one finger within the os uteri, and drawing it forward, at the same time having a finger of the other hand in the rectum, when the upper portion of the mass is thrown more backwards, and encroaches upon the cavity of the rectum to a greater degree. The size of the portion within reach is equal to that of a small pear, but its upper terminus cannot be felt; pressure upon it by the finger produces slight pain. It does not constrict the canal, so far as we can reach, to a sufficient degree to produce the symptoms of obstruction under which she labors.

On the patient's admission into hospital, and from the 6th to the 8th, several attempts were made, without success, to relieve the bowels by means of enemata; and as the symptoms became more urgent, and the return of the injections established the insurmountable nature of the obstacle, it was determined, in consultation on the 8th, that recourse should be had to M. Amussat's operation.

When the woman was laid upon her belly, the seat of the descending portion of the colon in the left lumbar region was distinctly marked by the great lateral distension of the loin, and the tympanitic resonnance upon percussion. A transverse incision was made over it, extending from a point about two inches distant from the spine, directly outwards; this incision was four inches long, and was situated about one inch above the crest of the ilium; the latissimus dorsi and quadratus lumborum muscles being divided, a mass of fat started out through the wound, and below this the bowel might be felt greatly distended. A sufficient proof that the peritoneal cavity had not been opened was deduced at this stage of the operation, from the unbroken cellular connections of the gut with the adjacent parts, and the inability to pass the finger around it, from the wound; the projecting adipose tissue being next separated from the intestine with the handle of the scalpel, two strong ligatures were passed through the coats of the colon at a short distance from each other, and fastened to the lips of the external wound; an aperture, an inch long, was next made into the bowel, by a vertical incision between the two sutures, when a sudden rush of fetid air took place, followed by the rapid expulsion of at least three pints of dark green semi-fluid and highly offensive fæces; the distension of the belly was soon relieved, but slight pressure of the hand upon it caused the excrementitious liquid to pump out through the lumbar wound, like water from a fountain; the relief of the patient was immediate, but the suddenness and amount of the discharge produced faintness. She was placed in bed, and had a little brandy and gruel; warm wetted cloths were applied to the wound, and she was ordered to take directly thirty minims of liqr. opii. sedativus.

9. Had a tolerable night, with short but refreshing sleeps; her face is more cheerful, her tongue clean and moist; she has not vomited since the operation, nor has she felt any nausea; her appetite, on the contrary, is rather inordinate, and she asks frequently for brandy to relieve her lowness; her skin is warm, and her pulse 96, and compressible; she has had one copious evacuation from the loin, which contained hard fœcal masses, and was extremely offensive, besides several smaller and more liquid discharges; she has made water three or four times; her abdomen is lessened in size, and from the flaccid state of the muscles, the intestines fall from side to side with each motion of the body, constituting a source of discomfort; some tenderness, on firm pressure, was felt in the left iliac region, but it was slight, and was not perceived in any other part; no matter of any kind has been voided by the rectum, nor has any inclination for this been felt; her abdomen was lightly compressed by a bandage, in order to give support to the intestines, and prevent the irritation excited by their unrestrained motion.

10. The evacuations from the artificial anus have been more numerous and recent; their consistence is thinner, their color yellowish green, and their smell less offensive; her abdomen is to-day full and tympanitic, and very slight tenderness is yet felt on the left side, just in front of the wound; the irritability of bladder continues, and the urine is scanty and high colored; her breathing is easy, her skin warm and soft, and her tongue whitish and moist, but her pulse has been throughout the day very excitable; at eight, a.m., it was 98, and at eleven, a.m., 130, whilst

this evening it is 100, sharp, and small; she feels great lowness, and craves for wine; in consequence of the disposition to diarrhœa, she has been ordered arrow-root, beef-tea thickened with isinglass, rice-milk, &c., and since morning has taken the following draught every fourth hour:—Take of sesquicarbonate of ammonia, five grains; of aromatic confection, ten grains; of mint water an ounce. Mix.

11. Going on most favorably. She said that she felt soreness of the belly, but no pain was complained of upon pressure; the support afforded by the bandage has been beneficial. Six stools have been voided by the lumbar opening, in the course of last night and to-day; upon straining, in order to empty the bowels, she declares that flatus escaped by the anus; about eight o'clock this evening she was attacked with shivering, which lasted for a few minutes only, and has been succeeded by perspiration; she felt no pain, but immediately after the rigor, some hard scybalœ were discharged through the wound; she feels nausea, but has not vomited; her pulse is now (ten, p.m.), 132, and sharp, and her body is bathed in sweat.

From this date up to the 17th the patient continued in a favorable state; but on the morning of the 17th she had a rigor, which continued for an hour, and was succeeded by profuse sweating. The pulse was now increased in frequency, and continued above 100. On the 19th she was feverish; the pulse 120, and sharp; skin hot and moist; cheeks flushed; tongue red, with thirst. Her abdomen has been lessened in bulk, but is to-day full and doughy, without tension or tenderness. She has passed only one stool from the wound in the night, and that a very scanty one. Ordered a tablespoonful of castor oil, and, after this had operated, two tablespoonfuls of infusion of roses every four hours.

21. The castor oil operated freely yesterday, and the bowels being thus unloaded, again rendered the belly pendulous, requiring support by external compression. Her cough has been troublesome, and coarse mucus with sibilant rattles have been audible over the whole chest, with the expectoration of a frothy, watery, and non-adhesive mucus; she was better this morning, and conversed with some spirit; her pulse was 100, and her skin was cooler and dryer; her bowels had been scantily moved in the night, and felt full, in consequence of which another dose of castor oil was given; at my night visit, I found her highly delighted, having *passed two copious, soft, healthy stools per anum*, without the use of the lavement, besides several free, liquid evacuations from the wound; there seems, however, to be a deficiency of reparative action, since the surfaces of the incision, though clean, are pallid and feeble, and the granulations large and flat; its extent, too, is scarcely, if at all, diminished.

On the 23rd unfavorable symptoms manifested themselves; the patient complained of faintness, and vomited some dark fluid; pulse small, 132; abdomen full and soft; quite free from tenderness. She was ordered to have some brandy and water, a dry fomentation to the belly, and a grain of solid opium directly.

On the 24th the patient was evidently sinking; respiration frequent; pulse 150. Diffusible stimulants were administered, but she sunk about three o'clock, p.m.

Sectio Cadaveris, Twenty Hours after Death.

The head was not examined.

Chest.—The pleural cavities presented no deviation from health, excepting an intimate adhesion between the investing and reflected portions, at the base of the left lung, by ancient, short, membranous bands; the lungs were slightly congested behind, from post-mortem gravitation, but their parenchyma was healthy, and entirely free from adventitious deposit; the bronchial mucous membrane was slightly injected, and puffy in some parts, and the tubes contained some frothy mucus; the pericardium and heart presented no trace of disease.

Abdomen.—The *parietal peritoneum* was universally thickened and opaque; in some of the more translucent parts the subjacent vessels were seen to be unusually large and injected; this opacity was pearly, and was not accompanied by any recent plastic effusion, excepting in the epigastric region, where thin, soft, filamentous bands passed from it to the liver; its cavity contained about a pint and a half of thin, serous pus, part of which was lodged in the iliac and lumbar fossæ, but mainly in the true pelvis; the *visceral peritoneum* was the seat of corresponding changes; where investing the liver, it was thick, opaque, and thinly coated with patches of lymph, some of which were recent and rough, from having been torn in opening the belly; the splenic portion was considerably thickened, adhered intimately to the diaphragm, and, like the liver, had layers of recent lymph upon its surface; over the stomach and anterior layer of the great omentum, its surface was uneven from thin laminæ of lymph of some standing, which adhered firmly; the vessels of the omentum were also congested. In that part of the serous membrane which invests the small intestines, increased vascularity and thin deposits of lymph were also seen, and a few convolutions of the ilium on the left side presented the same deposit in a rounded granular form, whilst the opposed surface of the great omentum had undergone similar changes. When the omentum was raised from the intestines, and turned upwards over the stomach, the cœcum was found lying on the left side of the spine, towards the left lumbar region, being apparently pushed into this position by the distension of the small bowels situated below, and to its right side upon replacing the omentum, a portion of the transverse arch of the colon was found to pass immediately in front of the cœcum; the small intestines and caput coli were distended by air, whilst the large intestine beyond this point was contracted, and contained only a very small quantity of fæces; the descending colon at the point opened was firmly adherent to the muscles of the loin, and required dissection for its separation. In effecting this attachment it had become drawn backwards, so as to form an angle inclining towards the loin; the peritoneum at this part was most accurately examined; its integrity was perfect, and it exhibited no greater amount of inflammatory action than any other portion of the membrane; the sigmoid flexure of the colon lay coiled in its natural position, but immediately below the brim of the pelvis the rectum became lost in a hard mass, partially surrounding it, though mainly occupying its anterior aspect in the recto-vaginal septum. This growth, upon a more careful examination, was found to con-

sist of scirrhous matter deposited in the loose cellular textures of the septum; it was intermixed with condensed fat, and reached from within a short distance of the fundus, downwards in the recto-vaginal septum, to at least an inch below the os uteri; the rectum, at the upper part of this mass, and about ten inches distant from the anus, was contracted in its calibre, by a carcinomatous thickening and conversion of its coats; the length of the stricture was about four inches; its margins were formed by two smooth, thick, and elevated lines, arising from the deposit of cancerous matter in the submucous cellular tissue; they were red, and vascular, especially in the lower; the interior of the gut, in this space, presented patches of ulceration, and in two or three places a dark brown softening had commenced, and formed small cavities, from one of which a sloughy sinus extended deeply into the interior of the recto-vaginal tumor; the textures of the bowel in the site of the contraction, were intimately incorporated with the carcinomatous tumor, whilst its connection with the uterus though close, was yet separable by the knife; the amount of constriction of the bowel was not very great, since the middle finger could be passed through it; the structure of the rectum, above and below, was quite healthy, as was that of the intestines generally; the descending colon at the point of operation presented an aperture nearly an inch long, of semicircular form, with rounded edges, owing to the prolapse of mucous membrane through it; its color was natural, excepting around the hole, where it had an uniform pink tinge; the aperture was oblique with regard to the axis of the colon, and did not occupy more than a sixth of the calibre of the tube in its contracted state; the folds of the mucous membrane converged towards it; the interval between its upper angle and the left kidney was about three-fourths of an inch; the liver was large, healthy in structure, but dark in color from venous congestion; the spleen was also dark, purple, and finer than usual in its consistence; the genito-urinary apparatus was quite healthy.

[We have abridged the preceding case from a complete history which Mr. Jukes has just published, and which we recommend to the attention of the profession. Mr. Jukes has appended some interesting and judicious observations to the report of his case, and illustrated it by four drawings on stone.]

A SUBSTITUTE FOR JALAP.

The powdered seeds of the ipomæa cærulea, in doses of 30 to 40 grains, act as a quick, safe, and pleasant cathartic. We have made this seed the subject of numerous experiments. In 100 cases in which it was given under our direction, in the Police Hospital of Calcutta, it proved purgative in 94, occasioned vomiting in 5, and griping but in 15, and produced on an average five stools within two hours and a half; the operation generally commenced in an hour, and in these experiments was never delayed beyond four hours.

The alcoholic extract, which consists of resin and oil, is deep brown, ductile, of excellent pillular consistence, and keeps for several months. In ten grain doses it produces all the effects of jalap with certainty and speed; the taste is scarcely perceptible. Dr. Chapman has used it in several cases at the General Hospital, and reported on it most favorably to the Medical Board; Dr. Leckie of Bhagulpore, Dr. Green of Howrah, Drs. Martin, Stewart, and Goodeve, have given similar accounts of its efficacy.

The seeds sell for four seers (8 lbs.) for the rupee; these will yield from 15 to 20 per 100 of alcoholic extract, and the whole of the alcohol may be recovered by distillation. We have thus a remedy of unparalleled cheapness, perfectly equal to jalap as a cathartic, superior to it in portability and flavour, and occurring in all parts of India. We are consequently independent in every respect of the South American article.—*Dr O'Shaughnessy, Bengal Dispensatory.*

PROVINCIAL MEDICAL JOURNAL

SATURDAY, JULY 30, 1842.

We have received several letters from Manchester, Bristol, and many other places, on the subject of animal magnetism, neurohypnotism, &c., which, for some time back, has served to amuse or astonish the population of our provincial towns and rural districts. As we have invariably declined taking any notice of these communications, although some of them were forwarded by respectable correspondents, we feel called upon to say a few words on the motives which have determined us to preserve, for the present at least, an absolute silence upon this matter.

We are not of those who would reject, *a priori*, mesmerism, magnetism, neurohypnotism, or whatever else it may be called, as an absurdity unworthy the notice of rational beings. There may be things of which our philosophy hath not dreamed—the nervous system may give rise to phenomena irreconcileable with our present ideas, and utterly incomprehensible in the present state of our knowledge; hence we are not to reject facts because of our inability to comprehend them, nor is it consistent with true science to declare every phenomenon absurd which may not tally with existing ideas.

We do not, therefore, refuse to discuss the facts and experiments brought forward by the disciples of Mesmer, or the more recent curiosities of the hypnologists, because we deem them absurd, or unworthy of record in the pages of a scientific journal, but for the following reasons, which we shall endeavour to comprise in as brief space as possible, and which we here offer as an explanation to correspondents, whose letters on Mesmerism, neurohypnotism, &c., we have declined to insert.

It is clear that if the phenomena of magnetism are to be examined in a scientific manner, they must be examined as part and parcel of human physiology. Animal magnetism, divested of its mysteries, is merely a certain influence, the nature of which is unknown,

but which is said to produce certain effects on the living body; these effects are chiefly, if not exclusively, confined to the nervous system. The influence is said to be conveyed from one living body to another, by means of certain manipulations, or nervous phenomena are said to be excited in an individual by certain acts of his own. Now, we repeat that all the questions involved in this matter are questions of human physiology, and should be resolved in the same manner as other questions connected with physiology. Whenever this shall be done—whenever any competent, honest, and impartial observer, shall investigate the phenomena alluded to in a scientific spirit, guided by the rules common to all scientific inquiries, and evidently seeking truth for truth's sake—then shall we readily publish the results of his researches, and direct public attention to the subject of his inquiries—but not till then. Can any one for a moment pretend that the melancholy exhibitions which afflicted the friends of medical science in London a few years back, or the half-crown prelections of itinerant orators in the provinces, should be confounded with scientific demonstrations? Has a similar course been pursued with respect to any other physiological investigation?—or can any faith be placed in facts, any weight attached to experiments, which are thus forced upon the public to gratify personal vanity or a despicable love of worldly gain? Assuredly not. A crowded theatre is not the place in which a complex and highly difficult problem of physiology can be solved, nor are the *petit-maitres*, either of town or country, proper judges of a subject which, if it be not a vain dream, involves the most extraordinary and mysterious train of phenomena that have ever been submitted to the intellect of man.

We conclude, then, as we commenced. Let us have any facts from a respectable source—the history of any experiments performed in a scientific manner, and by men who are above reproach—and we shall pay to them the attention which they merit; but we shall not indirectly assist a parcel of charlatans, fools, or designing philosophers, to disgrace their profession, and extract money from the pockets of the public, under pretence of the pursuit of truth.

In alluding last week to the approaching anniversary meeting of the Provincial Association at Exeter, we stated that it was to take place on the 4th and 5th of August. We take the earliest opportunity of correcting an error into which we have fallen, as too many do in more serious matters, by trusting to memory instead of referring to official records.

The anniversary will take place on the 3rd and 4th of August, and not on the 4th and 5th, as we mentioned last week. The council will assemble at the Athenæum, Bedford-circus, on Wednesday, the 3rd of August, at eleven o'clock, a.m., to make the necessary arrangements for the general meeting of the Association. The retrospective address in medicine will be delivered by Dr. Black, of Manchester, and the address in surgery by W. Sands Cox, Esq., of Birmingham.

An outline of the report of the council now lies before us, but we can only allude to it in general terms, as the "outline" has always been considered a private document until it has received the assent of the general meeting.

The report first alludes to the Transactions of the Society, the last volume of which fully sustains the original character of the Association, being occupied with contributions on subjects for the investigation of which the Provincial Association was instituted. A copy of the Transactions, and a number of the "Provincial Journal" are supplied to every member whose subscription is not in arrear. By this arrangement each member receives more than double the value of the guinea which he subscribes annually. To furnish a volume and a weekly journal to thirteen or fourteen hundred persons is, however, an undertaking attended with very serious expense, and involving considerable responsibilities; we are not, therefore, surprised to find that the council urges on the attention of members the absolute necessity of paying up their subscriptions regularly. In the great majority of cases we feel assured that the apparent neglect depends on want of thought or of opportunity; but the facilities afforded by the post-office for the transmission of small sums are so great as to leave little excuse on the latter ground.

The moral position of the Provincial Association, and the material advantages derived from connection with it, infinitely outweigh those of similar associated bodies; and it is not too much to expect that some exertion will be made by those who reap the harvest, to sustain the efforts and follow out the intentions of the sowers of the seed.

On the subject of medical reform the "outline" contains a brief history of the labors of the council during the past year, but the late declaration of Sir James Graham has given a new turn to affairs. No legislative measure will be introduced during the present session of Parliament, and the general meeting will have full time to determine on the course to be pursued by the reform committee, whose powers will probably be continued for another year.

The question of poor-law medical relief has always commanded the most serious attention of the council, and were we inclined to make even an innocent boast, we might affirm that the concessions recently obtained from the poor-law commissioners are mainly attributable to the unwearied exertions of the poor-law committee. Another candidate for the honor has, however, recently appeared in the field, and we shall remain silent, being unwilling to ruffle a feather of our

worthy ex-president, "the most successful reformer of the day."

It is the intention of Mr. Cartwright, of Shrewsbury, to moot the long disputed question of assurance office fees at the Exeter meeting. An opinion may be delivered by the assembly on the point at issue between the profession and the offices; but we should much question the propriety of any resolution or stringent proposition being put forth under the sanction of the Association. This is one of Sir Roger's questions, "On both sides of which a great deal may be said," and on which reason and feeling are very like to clash.

The proposition of Mr. Rumsey is one of much importance; but from motives which will be readily appreciated, we shall not allude to it on this occasion.

REVIEWS.

A Practical Treatise on Diseases of the Scalp. By JOHN E. ERICHSEN. London: Churchill, 1842. 8vo, pp. 192.

A treatise on diseases of the skin, but especially one confined to cutaneous affections of a particular part of the body, may, to many of our readers, appear superfluous at the present day. Mr. Erichsen excuses the publication of his treatise on diseases of the scalp, on the grounds that these affections have hitherto and in general been grouped under the genus "porrigo," and that much practical advantage may be derived from placing each disease under the class to which it naturally belongs.

Keeping this principle in view, Mr. Erichsen directs especial attention to the differential diagnosis of cutaneous affections of the scalp, and endeavours, with success, to show that they are as amenable as any others to a rational practice. This is a plain, common-sense view of the question. An accurate diagnosis of disease is an essential element in the practice of medicine, and there is no reason why it should not be applicable to cutaneous affections of the scalp as well as any other class of diseases; unless we have precise ideas of the nature of the disease which we are treating, past experience is of no avail, for we cannot conclude from one case to another unless we are in a condition to say that they are identical or analogous.

The first point to be attended to in the diagnosis of a disease of the scalp is the *elementary* form that it may assume; a knowledge of this will lead at once to a knowledge of the particular species or variety to which it belongs, while if we trust to the secondary characters we shall be constantly liable to error.

The forms of disease which ordinarily occur on the scalp are four, and are characterised by vesicles, pustules, tubercles, or scalls; our first object, then, should be to ascertain to which of these four orders the disease belongs; this done, we decide on the genus, and from the genus the species.

As an example, Mr. Erichsen supposes an affection of the scalp characterised by the presence of a number of small, accuminated, transparent collections of serum, scattered irregularly over its surface, and attended by a good deal of itching and tingling; this is not a pustular disease, and cannot, therefore, be impetigo; there are no scabs, and it cannot be squamous; the absence of the yellow, cupped tubercles of favus shows that it cannot be tuberculous; the disease must, therefore, be *vesicular*, and belong to one of the two genera, herpes or eczema; but herpes it is not, because the vesicles of that genus are globose, and commonly arranged in rings instead of being scattered irregularly over the scalp; hence, we are justified in pronouncing the disease to be eczema.

The secondary characters of a cutaneous affection of the scalp are not, however, to be neglected as elements of diagnosis. They are peculiarly useful in pointing out the species of the disease; besides, in many cases, they are the only elements which we possess, as the primary characters have disappeared during the progress of the complaint. Thus, when we find on the scalp of a patient a number of dry, yellow, circular cupped crusts, we may, without seeking for the elementary characters of the eruption, be certain that the disease is favus. The numerical method, also, according to the author, may assist us in our diagnosis; for example, when we know that eczema occurs twenty times more frequently on the scalp than herpes does, it is much more probable that a vesicular disease of that region is of an eczematous than of a herpetic nature. The age and constitution of the patient may likewise be taken into account as auxiliary circumstances.

Thus, impetigo granulata commonly occurs after the third or fourth year, whereas impetigo eczematosa generally appears before that period; the former attacks weakly and ill-fed children, the latter occurs in the robust and apparently healthy.

We have already stated that herpes and eczema are the only two vesicular diseases which affect the scalp; their distinguishing characters, whether elementary or seconday, are thus concisely enumerated by our author. In eczema the vesicles are small, very numerous, accuminated, and scattered irregularly in patches of various extent, without any definite form; in herpes they are few in number, globose, and always arranged in groups, generally presenting a circular outline, the circumference being inflamed and studded with vesicles, while the centre is healthy.

In their secondary characters the two diseases differ more distinctly. In herpes the scabs are thin, few in number, and small in extent, being chiefly confined to the circumference of the affected patch; in eczema we either have extensive, laminated, yellowish white or greyish scabs matting the hairs together, and often attaining considerable size; or we find a thin fluid which constantly exudes from innumerable small openings, soaking the hairs, and forming them into small, yellowish-grey or dirty locks.

The only pustular diseases which affect the scalp are the varieties of impetigo; these are I. *sparsa*, I. *granulata*, and I. *eczematosa*. In impetigo *sparsa* the

pustules are few, of a mixed kind, and scattered irregularly over the scalp; the pus concretes into large, rich scabs, presenting the appearance of concrete honey. The pustules of I. *granulata* are achorous, usually small, of a light yellow color, and irregularly scattered also; the fluid is somewhat ichorous, and concretes into small, grain-like scales, of a dirty greyish color, and generally strung upon the hairs like dried crumbs of bread. The elementary character of I. *eczematosa* is mixed, the eruption being composed of vesicles and achorous pustules; the fluid effused is viscid, and rapidly concretes into thin, large scabs, which often extend down on the temples, forehead, or cheeks.

Tubercular diseases of the scalp are comprised by our author under the genus favus. In its elementary form, favus consists of a number of very minute round tubercles, circular in shape, and of a yellow color, each of which is traversed by a hair, and appears to be seated within the structure of the cutis. We seldom, however, have an opportunity of seeing this disease in its elementary form; the varietes are F. *dispersus* and F. *confertus*. The former is characterised by the presence of a comparatively small number of tubercles scattered over the scalp; these increase in size, and gradually form crusts, which, when isolated, are perfectly circular, of a clear yellow color, and depressed in the centre, which is traversed by a hair, and inserted as it were into the cutis. Favus confertus differs from the preceding species merely in degree and arrangement.

We have thus given a brief outline of the diagnosis of cutaneous affections of the scalp from the clear and well-arranged descriptions of Mr. Erichsen. On the treatment it is unnecessary for us to dwell.

The general observations which the author has prefixed to the body of his work are judicious, and well worthy of perusal; and we feel it but due to Mr. Erichsen to say, that his treatise is highly creditable to him both as a writer and an observer of disease.

The Climate of the South of Devon, and its Influence on Health, &c. By Thomas Shapter, M. D. London: Churchill, 1842. 8vo. pp. 258.

The object of the author of this work is to illustrate the climate and general medical character of the southern portion of Devonshire, a county which has long been celebrated for the mildness of its seasons, and served as a favorite resort for the invalid.

Dr. Shapter's treatise is divided into two parts; in the first we have an account of the climate and diseases of the principal towns of the South of Devon; in the second, a detailed history of its geology, natural productions, economy, and statistics. The impression which a perusal of Dr. Shapter's volume has produced on us is one highly favorable to the author, who has collected, from the best sources, a variety of interesting matter connected with the history of Devon, and enriched the observations of others with the result of his own experience and research. The chapter devoted to the vital statistics of Exeter and its immediate neighbourhood has been composed with great care, and evidently at the expense of much labour, and will afford useful information to those who are interested in determining the probabilities of human life.

We shall take another opportunity of noticing some of the most prominent points of Dr. Shapter's treatise, which in the mean time we recommend as a very interesting and useful contribution to the topographical history of the counties of England.

ACADEMY OF MEDICINE, PARIS.

July 5.

PATHOLOGY OF THE EAR.

M. Meniere read a memoir "On the Pathological Anatomy of the Ear in Deaf and Dumb Persons." The auditory apparatus may be distinguished into three parts, each of which bears an analogy to one of the tissues of the body. Thus, the external ear is connected with the integumentary tissue in structure, and is subject to analogous diseases; the middle ear is more nearly connected with mucous tissue, as we may gather from its communicating with the air passages, the continuity of its lining membrane with the mucous tissue of the pharynx and the effects of local treatment. Finally, the internal ear contains an organ which is essentially nervous. The author has seen cases of nervous headache, in which the pain extended into the internal ear; besides, nothing is more common than cases of nervous headache. The attention of the author has been chiefly directed to the frequency of deafness in tuberculous persons. He has discovered, as the result of numerous autopsies, that no part of the ear is exempt from the deposition of tubercular matter. Typhoid fever is likewise frequently followed by some degree of deafness; but the cause of the loss of hearing is not always the same.

The author next observes, that all deaf and dumb persons are not deprived of the power of hearing in the same degree; some are totally deaf, while others are capable of hearing certain sounds. This observation would be an important one, if pathological anatomy enabled us to point out the reason of this difference; but, unfortunately, such is not the case, for the most perfect state of the organs of hearing has been found in persons who were completely deaf.

The following are the results of the author's researches on the pathological anatomy of deafness with mutism:—

The meatus externus presents great variety of dimensions, both in length and breadth; but the same degree exists in persons enjoying the faculty of hearing in perfection. In six out of fourteen cases the membrana tympani was healthy; in the remaining cases the most obvious change was perforation of the membrane. Alterations of the cavity of the tympanum are rare; they are seldom found, except in cases where the permeability of the Eustachian tube was diminished or completely destroyed. Tubercles are occasionally found on the membrana tympani. The labyrinth is the place in which changes of structure most frequently exist. The author has seen, in two cases, the vestibule reduced to half its normal size and without any fluid. In one case the superior semi-

circular canal was obliterated; in two others the fenestra ovalis was closed up and the spiral plate of the cochlea made only one turn and a half. Finally, in one case the auditory nerve was reduced to one half of its normal size.

From the observations of M. Meniere, it results that the loss of hearing in deaf and dumb persons is rarely congenital; it usually occurs in the first two or three years of life, and is produced by disorders of a convulsive kind. The primary lesions take place in the nervous portion of the auditory apparatus, and the changes which occur in the middle and external ear are for the most part consecutive to the former.

ATROPHY OF THE PENIS.

M. Bourgignon read the case of a man, now thirty-eight years of age, who had frequently labored under the venereal disease, for which he had been treated by mercury. His penis gradually diminished in size, and at length was not larger than that of a boy five years of age; the hair of the pubis fell off at the same time. While these changes were taking place, the man's skin became white, the hands fine and soft, and the form of the body assumed the characters of the female; the character and temperament of the patient underwent analogous changes, but no alteration of the voice was observed. Secondary and tertiary symptoms of syphilis made their appearance during this curious change in the man's constitution. He was submitted to a course of iodine with mercury, and the syphilitic symptoms gradually disappeared. The genital organs seemed now to recover a little from the state of atrophy into which they had fallen, and some favorable change in the man's general appearance is already manifest.

June 19.

PRESERVATION OF LEECHES.

M. Huzard read a report on an essay of M. Derens, relative to the best mode of preserving leeches after they have been used. According to the author, the best way of relieving the leech is the application of pressure, by which the whole of the blood is expressed, and after which the leech may be used again with safety and effect.

LITHOTOMY—NO STONE.

M. Ripault read the details of a case in which lithotomy had been performed, but no calculus found. The patient, a man far advanced in life, had exhibited all the rational symptoms of stone in the bladder. On being sounded, the characteristic shock of the sound striking against a solid body was heard. The lateral operation was performed, and the forceps introduced several times, but nothing came away except some clots of blood. The pains which the patient had experienced formerly, now disappeared, and did not return for several months; they then recurred with increased intensity, the difficulty of making water became much greator, the urine was ammoniacal, febrile symptoms set in, and the patient died six months after the operation. On examining the body, the prostate gland was found much enlarged, very hard, and when cut into appeared like horn. When struck with the sound, it produced the same sensation which had deceived the medical attendants during life.

MEDICO-CHIRURGICAL SOCIETY OF BOLOGNA.

February 28, 1842.

TRANSPOSITION OF ABDOMINAL VISCERA.

M. Forliveri communicated the case of a man, aged forty-two, who died with symptoms of very acute enteritis. During life it had been observed that the patient's abdomen was extremely contracted, and the thorax enlarged. On examining the body, the greater portion of the intestines, together with the spleen, stomach, and epiploon, was found in the cavity of the thorax. An opening existed in the tendinous portion of the diaphragm, through which the abdominal viscera had passed, and the author thinks that this opening must have been congenital.

[A somewhat similar case is recorded by Assistant-surgeon Williamson, in the last number of the "Medical Gazette." A serjeant of the 88th regiment was wounded by a musket-ball in the year 1811. The ball passed obliquely through the chest, entering just below the left nipple, and passed out at the back, between the eighth and ninth ribs. The wounds soon healed, but the man, who had previously enjoyed excellent health, was never completely well afterwards, although he continued to serve as a soldier for nearly twenty-two years, and lived to the year 1833. Since the period of his wound the man's appetite became impaired; he was subject to flatulence and dyspeptic symptoms, and vomited whenever the stomach was overloaded; he also found that he was unable to wear his knapsack with ease, and his breathing became much affected whenever he walked at a quick pace or ascended a hill.

After death, the whole of the stomach, and the greater part of the transverse arch of the colon, with the omentum, were found in the lower and anterior part of the left side of the thorax. From the appearances of the parts, it seemed probable that the wound of the diaphragm extended about three inches in a transverse direction, near to the centre of the dorsal attachments of the left side of that muscle, but there was considerable difficulty in ascertaining the point with precision.]—EDS.

ROYAL MEDICAL SOCIETY OF VIENNA.

March 31.

Dr. Mojsisovics communicated a paper by Professor Von Tognio, of Pesth, on a case of diabetes mellitus. The patient had been very much reduced by the disease, which resisted every mode of treatment employed, when recourse was had to the acetate of morphia, in the dose of a grain daily. By this remedy the patient was perfectly cured. The urine contained a great quantity of sugar, but no urea; as the opium took effect, however, the normal quantity of urea was found in the urine.

Dr. Bittner related a case in which paralysis of the lower extremities and of the bladder occurred as a sequela of typhus fever; the secretion of urine was at the same time increased to from thirty to forty pints a-day, but it did not contain any saccharine matter. The patient was placed on animal diet, and from 6 to 136 drops of the hydro-sulphuret of ammonia given every day. The paralysis gradually declined, and the patient was well in three months.

RETROSPECT OF THE MEDICAL SCIENCES.

DIAGNOSIS OF AFFECTIONS OF THE PERICARDIUM.

If we examine the parts when removed from the subject, seeing the heart collapsed and the pericardium loosely surrounding it, we cannot understand how the various morbid sounds are produced by the action of the one within the other. But such is not the condition of these parts in the living body; the pericardium is there firmly fixed at its apex and base; it is tense, and stretched like the parchment of a drum; and if in this bag we have an enlarged heart moving slowly backwards and forwards, the heart itself being turgid with blood, and rigid from the contraction of its muscles, and if the internal surface of that bag have been previously the seat of morbid deposits or effusions, punctiform or ridge-like, such conditions of the cardiac sac must cause the sounds produced by the friction of the opposing surfaces to vary very much in tone, loudness, and duration. Pericarditic sounds may, therefore, be as loud and as prolonged as valvular sounds—a fact hitherto scarcely sufficiently dwelt upon by pathologists; pericarditic sounds, like valvular, may likewise be accompanied by frémissement, and, consequently, in endeavouring to form a diagnosis between the two sets of sounds, we must seek for means of distinguishing them, not in their loudness, tone, or duration—not in the presence or absence of frémissement, but in the fact that pericarditic sounds appear to the attentive ear to issue from a more superficial source, are much more extensively diffused, and are almost equally audible in regions of the chest very distant from each other, as, for instance, under both clavicles. Pericarditic sounds, too, undergo much quicker alteration in character than valvular, which, when once formed are almost always permanent; and, to conclude, pericarditic sounds seem to be conducted by the solid parietes of the chest, while valvular sounds are chiefly propagated by the contents and parietes of the great vessels. A case published by Dr. Watson in the "Medical Gazette," for 1835, strongly illustrates these peculiarities of pericarditic sounds. The murmur represented very exactly the upward and downward action of a saw on rough wood, and was by far the loudest sound of the kind ever heard by Dr. Watson. It was distinctly heard over the whole of the chest, both before and behind, only somewhat fainter as the distance from the heart became greater. With the ear upon either scapula, you might have supposed you were listening to the deep, buzzing vibrations of the larger string of a bass viol. The sectio cadaveris showed the pericardium everywhere, except at its posterior part, covered with a thin coat of firm grey lymph, quite rough, with minute papillæ projecting from almost every part of its surface, of an almost horny consistence, harsh, and resisting to the touch.

In some cases of pericarditis, the heart's action becomes increased in strength for many hours before any physical sign of pericarditis can be detected, and before any pain is felt in the region of the heart. This increase of action is maintained and added to, when symptoms of inflammation of the pericardium come on; nor does it notably decrease for several days after the cessation of those symptoms. The explanation of this is the supposition that the cardiac muscular structure was first inflamed, this state continuing after the pericarditis had subsided; for it is a general principle that superadded inflammations generally yield to remedies before the fundamental and primary disease exhibits a manifest improvement.

When the pulse suddenly becomes feeble, faltering, intermittent, or unequal, without any apparent or adequate cause, especially if attended with the usual concomitant symptoms of an obstructed circulation, there is, according to Chomel, the strongest evidence of pericarditis. There exists a remarkable disparity between the action of the heart and the strength of the pulse; for it often happens that the pulsations in the cardiac region are violent, while the pulse is weak and thready at the wrist. In pericarditis it was formerly supposed that the pulse was invariably accelerated, except towards the close of the disease, when the vital powers became exhausted, or its motions impeded by effused fluid. But this is so far from being correct, that in several cases it will be found not to be quicker than natural from the beginning to the end of the attack. A perfectly natural pulse is not an unfrequent occurrence in pericarditis, and in two cases which came under Dr. Graves's care, there was a sudden decrease in the frequency of the pulse at the very origin of the disease. In one of these cases the pulse fell to 36, and was extremely weak, faltering, irregular, and occasionally intermittent. The cause of these peculiarities may be the indirect effect of the inflammation on the nervous energy of the heart, or it may be that the rythm of its motions may be directly interfered with; but be that as it may, it is of paramount practical importance to recollect that a weak, irregular, and intermittent pulse may exist in the very commencement of pericarditis, that it may not exceed the natural frequency, or may fall much below that standard, and yet antiphlogistic treatment be required. In carditis and pericarditis, when the pulse is weak, irregular, and intermitting, when it is soft, natural in its frequency, or else morbidly slow, general venesection should never be employed; leeches over the region of the heart, cupping, blisters, and calomel with opium are best suited. Digitalis exerts little or no control over inflammation of the heart, and like colchicum, if given in doses at all proportioned to the danger, it often suddenly produces dangerous or even fatal prostration of the nervous system. In protracted forms of cardiac or pericarditic inflammation, colchicum combined with mercury and opium is an useful adjunct, and where the disease is decidedly chronic, refusing to yield to treatment, much benefit is sometimes derived from the hydriodate of potash. In such cases Mr. M'Donnell recommends the oil of turpentine, from the analogy with rheumatic iritis.—*Dr. Graves, Dublin Medical Journal.*

ULCERATED CANCER OF THE LUNG.

In Dr. Stokes's valuable communication on pulmonic cancer, he narrates an interesting case of ulcerated cancer of the lung, with extensive separation of the pleura, occurring in the person of a woman, thirty-five years of age, who was under his care in the year 1838. The attack commenced about four months previous to her admission, and was referred to expo-

sure to cold. She was then seized with severe pain in the right side, which became persistent. Her complexion was sallow, and remarkably cachectic; she complained of a constant, troublesome cough, with copious viscid mucous expectoration, frequently mixed with blood; the pain was referred to the right mammary region, to the postero-inferior part of the right side, and to the shoulder. The physical signs were, the sound on percussion over the anterior portion of the right side, from the clavicle to below the mamma, was decidedly and distinctly tympanitic, such as is observed in cases of empyema and pneumo-thorax, when the liquid effusion has so far increased as to leave but a thin stratum of air within the pleura; bronchial râles were heard over the surface of the lung, and the voice was very resonnant; posteriorly the lung was very dull, with a very feeble murmur.

In the course of a few days the tympanitic sound gradually disappeared, the respiration becoming decidedly cavernous in the inferior portion of the lung, the upper part being completely dull. She survived her admission not quite two months, during which time the physical signs varied greatly; one part of the chest giving the tympanitic sound at one time, and at another the respiration feeble, with mucous râle, or else more or less complete dulness of the parts. On examination of the body after death, the pleural cavity was found completely obliterated, but the lung could be seen not collapsed, apparently solid, and of a yellowish white color. The whole organ was converted into a mass, having less consistence than is observed in ordinary encephaloid disease; nor was its structure homogeneous, but rather granular, and exhibiting traces of the pulmonary cells, &c., infiltrated with a pearly white gelatinous fluid. A large portion of the organ was burrowed by anfractuous excavations, communicating with the bronchial tubes, or ending in fistulæ, running in various directions to the surface of the lung, where they terminated in superficial cavities, containing air and a whitish purulent fluid, and situated between the pulmonary pleura and the degenerated lung. This dissection of the pleura from the lung extended over almost the lower two-thirds of the organ. The remaining portion of the lung presented the more ordinary characters of cancer.—*Dr. Stokes, Dublin Medical Journal.*

ANEURISMS WITHIN THE SKULL.

A man, forty-nine years old, of intemperate habits, was admitted into University College Hospital, under the care of Dr. A. T. Thomson, laboring under apoplexy and paralysis of the left side. He survived about ten days, having previously recovered sensation, but not motion on the paralysed side. On examination of the head, the vessels of the dura and pia mater were much gorged, and the arachnoid was opaque, with effusion of lymph on the left side. The anterior lobe of the right cerebral hemisphere was discolored, and there was a patch of extravasated blood, about two inches in diameter, under the right parietal bone, beneath the pia mater; there was a smaller one on the left hemisphere, and about two ounces of bloody fluid effused at the base of the brain. The arachnoid was opaque at the base, and an aneurism, a little larger than a hazel nut, was discovered in the trunk of the carotid, where it gives off the arteria cerebri media, and another small one on the curve of the artery. The right portion of the circle of Willis was wanting. On the same artery of the opposite side there was also an aneurism nearly globular; the branches of the vessel passing to the anterior lobe of the brain were enlarged, and their coats thickened. The anterior lobe of the same side as the large aneurism was also softened almost to a pulp. The basilar artery was dilated, besides being white and opaque; when it was slit open, the coat was found to be much thickened. The anterior lobe on the opposite side was softer than usual.

It appears that, about six or seven months previous to this attack, this man, while in a state of intoxication, fell in the street, and cut the back of his head. From that time his manner was changed; he became garrulous, silly, and very irritable; and although he could previously drink to excess, yet, since that accident, a very little gin would make him tipsy.

To this fall Dr. Thomson attributes the formation of the disease, considering it to have produced such a change in the brain as predisposed it to inflammation and apoplexy. This predisposition depended on the derangement of the circulation caused by the fall, and the consequent formation of the aneurisms—a state favored by the man's habit of drinking; for it has been well ascertained that intemperance produces such a diseased condition of the arteries, that they are liable to give way in that manner which constitutes aneurism. The circulation between the branches of the carotid and the vertebral arteries by the circle of Willis, so essential to the equalisation of the circulation of the brain, being destroyed, and the branches of the opposite arteria cerebri media and the basilar artery being greatly dilated, and their coats thickened, the readiness with which any derangement of the general circulation would react on that of the brain will be at once admitted. There can be but little doubt that the softening of the cerebral substance which existed was induced by the defective supply of blood to the parts, caused by the large aneurism. The immediate cause of the fatal attack was, in all probability, a debauch the previous night.

This case is interesting, inasmuch as it adds another to the few recorded cases of aneurism within the cranium, and shows that they may attain a large size, that life may be sustained under very considerable derangement of the brain, and that organic changes within the skull are less likely to terminate quickly than inflammatory action set up in the organ, from either external or internal causes.—*London and Edinburgh Medical Monthly Journal*, July, 1842.

USE OF TARTAR EMETIC IN HYDARTHROSIS.

About four years since M. Gimelle published a communication on the employment of large doses of tartarised antimony in cases of dropsy of the joints. He has had recourse to it in twenty-eight cases, in all of which the effused fluid was speedily absorbed, and in all but two a rapid cure effected; in the two exceptions pain continued in the articulation, in one a month afterwards, in the other for forty days.

The use of the tartarised antimony in some cases increases the salivary secretion; it always causes abundant perspirations, especially during the night, and diminishes the quantity of urine secreted. Its first effect is to quiet the local pain; the second, to induce the absorption of the effused fluid, which it

effects in from eight to sixteen days. The dose at first given is four grains in the course of the day, two more being added daily, but never has a larger dose than a scruple been given in the twenty-four hours. Its use is never preceded, in the practice of M. Gimelle, by local or general bleeding; but if there be much fever, the affected joint exceedingly red and hot, or the digestive apparatus the seat of great irritation, then he thinks it would be advisable to relieve these symptoms before administering the antimonial. A very remarkable result of this practice is, that the patients take their food and wine while under the influence of the antimonial, and some even require an additional quantity at the end of a few days. Tolerance of the medicine may be regarded as a sign of an approaching cure, but its absence does not prevent the removal of the dropsy.

This treatment was pursued by Dr. Lafargue, of Saint Emilion, in a case of rheumatism of both knees, with effusion into the joints, with marked success. Fifty-eight grains of the antimonial were exhibited in the course of the treatment, dissolved in seven mixtures, and taken in eight days. Vomiting was caused only once, and a desire for food was induced by the use of the salt. Neither perspiration, diarrhœa, nor diuresis, were produced.—*Bulletin de Thérapeutique.*

THE MENSTRUAL FLUID.

M. Bouchardat undertook a new analysis of the menstrual fluid, obtained from a female, who consented to allow a speculum to remain in her vagina for ten hours, in order that an ounce of it might be procured. Without this precaution the fluid becomes mixed with vaginal mucus and urine, as the presence of ammoniaco-magnesian phosphate proves. The following is the analysis: water, 90.8; fixed matters, 6.92. The fixed matters were thus composed: fibrine, albumen, and coloring matter, 75.27; extractive matter, 0.42; fatty matter, 2.21; salts, 5.31; mucus, 16.79. The female from whom the secretion was obtained was a patient of M. de Boismont, and he considers the great proportion of water due to the delicacy of her frame, and her subsisting chiefly on a vegetable diet. Another specimen of menstrual fluid, examined by M. Donné, gave the following microscopic characters: 1st, abundance of the ordinary globules of the blood; 2nd, vaginal mucus formed of epidermic squamæ from the mucous membrane of the vagina; 3rd, mucous globules furnished by the neck of the uterus. From these examinations it results that the menstrual fluid does not differ from arterial blood. As to the acid or alkaline nature of the fluid, observed by authors, it depends upon the presence of mucus from the vagina and neck of the uterus. This mucus, as M. Nauche has proved, is acid in a healthy woman and after delivery, but becomes alkaline when it is glairous, or the product of inflammation; if only a limited portion of the passage be affected, the secretion will be acid in one part and alkaline in another.—*Boismont on Menstruation.*

SUPERFICIAL CANCERS.

M. Lisfranc has published a series of cases of cancer, in which under ordinary circumstances it would have been necessary to remove the diseased organs, but which he has shown, admit of permanent cure by the simple ablation of the part of the organ which is diseased. The first case he mentions is that of a man who consulted him in 1826, having a cancerous tumor, about half an inch thick, surrounding the penis behind the gland; its antero-posterior diameter was about two inches. It was ulcerated, immovable, and adherent, and presented all the characteristics of cancer. As the removal of the penis is an operation to which the greatest repugnance is always manifested, Lisfranc decided on making an exploratory incision, and by a careful and slow dissection lay bare the corpora cavernosa; if they were sound he would then proceed to extirpate the diseased growth, if not, he would amputate the penis. The additional pain of this proceeding would be well compensated by the prospect of retaining so important an organ. The operation succeeded remarkably well; the cavernous structure was healthy, only a small portion of the fibrous covering of the penis, where ulceration had taken place, being engaged in the disease, which was removed. The patient had not a bad symptom afterwards, and recovered perfectly in the course of three weeks. He showed himself to Lisfranc several times afterwards, and assured him he was perfectly competent to perform all his duties.

The successful termination of this case encouraged the surgeon to proceed in like manner with a patient who labored under a cancer of greater extent. It occupied the anterior portion of the scrotum, and about two inches of the skin of the root of the penis, and the posterior half of that organ. Every part was ulcerated, and the disease was of long standing. By a careful, slow, and laborious dissection, the testicles and spermatic cords were uncovered; the cancerous portion of the scrotum being cut away, the next step was to make a similar exploration of the penis, which being done, showed that the superior ligament was diseased, and must be removed. The carcinoma extended as far as the re-union of the corpora cavernosa, which were necessarily denuded as for an anatomical lecture, and even then it was requisite to scrape them with a bistoury to remove all traces of the disease. The patient recovered in rather less than seven weeks, preserving the virile power.

Cancer of the tongue has hitherto been treated by the ablation of the organ; but Lisfranc has demonstrated that, in some cases at least, the disease is superficial, and may be removed without permanent injury to the organ. He narrates the case of a young advocate, who was under his care in September, 1826, for an ulcerated cancer occupying the two-thirds of the right side of the tongue. Its ablation had been advised by several eminent surgeons, but Lisfranc decided otherwise. He separated the diseased from the healthy structure, and surrounded the former with a ligature, which was tightened by Mayor's tourniquet. The constriction was gradually increased, and on the seventh day, the slough having separated, there was a loss of only two lines in extent of the point of the tongue. The surface only was diseased; the deeper tissues were healthy, and cicatrised. This patient was seen by Lisfranc three years after the operation, and no relapse had occurred.

Several other cases are recorded by this talented surgeon, including cancer of the penis and vagina, of the ala nasi, the eyelids, the loins, the finger, &c., in all of which the primary exploratory incision showed clearly that the disease was superficial, and admitted

of its total ablation, without the absolute destruction of the organ itself. At the same time Lisfranc states that while some of these cancers are regarded as deep-seated erroneously, the latter condition may exist, and require the complete amputation of the part.—*Clinique Chirurgicale.*

STUDY OF MENTAL DISEASES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The following extracts from the last report of the visiting justices of the Middlesex County Lunatic Asylum may, perhaps, be deemed worthy a place in your excellent Journal at the present time, when extensive changes are expected, ere long, to be made in the education of those destined for the medical profession. Many of your readers are, doubtless, connected with public establishments for the insane, and the better they become acquainted with the success of the enlightened treatment pursued at Hanwell, the sooner, it is to be hoped, they will voluntarily introduce a similar system of management; I say *voluntarily*, because the bill of Lord Granville Somerset, providing for a more efficient inspection of county lunatic asylums, is, in my humble opinion, only a prelude to other legislative measures, requiring more uniformity in the regulations of these institutions, and making imperative the adoption of the non-restrictive plan of treatment. It is a notorious fact, that these public institutions are, in very many instances, merely regarded as places for the safe custody of the insane—that the proprietors thereof are illiterate and ignorant persons (I know the owner and keeper of an asylum licensed to receive upwards of one hundred patients, who cannot write his own name)—that there is a very loose, if any, classification of the inmates—and no remedial means, either direct or indirect, used with the view to restore the patients to health and the society of their relations and friends.

The expense incurred in providing an additional number of keepers will probably deter many from carrying out the humane and moral practice pursued at Hanwell, under the superintendence of Dr. Conolly; but as the new commissioners will not only inspect, but publicly report upon, the state and condition of every county asylum within their jurisdiction, it behoves the proprietors of these establishments immediately "to set their houses in order," and the medical men connected therewith, to show that they are not only sensible of, but have done all in their power to carry out the recent improvements which have been made in the treatment of those who are unfortunately deprived of their reason.

I remain, Gentlemen,
Your obedient servant,
G. W. DYKE, M.D.

Corsham, Wilts, July 10.

(*Report.*)

"The lamentable deficiency of schools for the instruction of medical students in the treatment of mental diseases has long been a national reproach. Your committee have for some months directed their attention to the subject, and in the early part of the present year, in compliance with the wishes of the resident physician, they authorised him, by way of experiment only, to give a short course of clinical lectures gratis to a small class of pupils, selected from the great hospitals of the metropolis by their respective boards of management."

The lectures commenced on the 14th of May, and terminated on the 18th of June last, and their progress was watched by the committee with mingled feelings of interest and anxiety.

It is with great satisfaction they are enabled to state that the experiment has been most satisfactory; no ill effects have arisen from the visits of the pupils to the patients under the guidance of the house surgeons for the necessary illustration of the subjects of the lectures; and the committee not only feel themselves warranted in recommending a renewal of the course in the ensuing spring, but confidently hope their example will be followed in other public and kindred institutions, and that the mystery in which the dreadful malady has hitherto been involved, and from which its disgusting cruelties and absurdities have arisen, will in a short period cease to exist.

No reflecting mind can doubt that the treatment of insanity in its early and acute stages should form part of the education of the general practitioner. Experience daily proves that when the disease assumes a chronic form, the comforts of the patients can be best assured in asylums of a public character. * *

The interest excited in the medical profession by the lectures lately delivered at Hanwell, and the numerous visits to that asylum of influential persons, unwearied in their efforts to lessen the sum of human suffering, induce your committee to indulge the hope that the time is not far distant when every institution in the country will, under the Divine blessing, enjoy the benefit of that moral, benevolent, and enlightened system under which the afflicted poor of the county of Middlesex have the advantage of being placed."

P.S. Since writing the above, the Licensed Lunatic Asylum Bill has been forwarded another stage; and in the debate, Lord G. Somerset said that the bill was framed with a view to obtain additional information, in order to legislate permanently on the question. Lord Ashley observed that he had formerly doubted the possibility of carrying out the system of non-restraint, but his doubts had been removed by a recent visit to the Hanwell Asylum; and having there witnessed the system pursued by Dr. Conolly, he felt bound to express the highest approbation both of the system and the manner in which it was carried out.

PAROCHIAL MEDICAL RELIEF.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Should the following observations be deemed of sufficient importance to obtain insertion in your very useful Journal, I shall feel both flattered and obliged. In the present age of improvement, I venture to offer some suggestions relative to the medical relief of the poorer classes. It has long been my opinion that parish patients would feel much more satisfied, and have less aversion to the existing poor-

laws, were they permitted, when ill, the privilege of choosing their own medical attendant. I have frequently heard them exclaim, "We are not even allowed the surgeon we like best, but are obliged to be attended by a man of whom we know nothing, or by one we cannot trust." I need scarcely appeal to you, as members of the profession, for confirmation of the fact how, in many instances, faith in the skill of the professional person tends to alleviate the sufferings of the patient, and acts in some measure as a remedy to the disease itself. The privations to which such individuals are subjected must be at all times great. Surely, then, it is not unreasonable to ask that they should enjoy the right of selecting the man in whom they place the greatest confidence; besides which, "a parish doctor," as he is termed, is always an object of abhorrence; however skilful, however great the attention received from him by paupers, they always fancy themselves objects of neglect. Such prejudice would, of course, be removed by the adoption of the measures I propose, which are these:—When a pauper is taken ill, he should apply to some responsible person, *appointed* in the parish where he resides, for an order (and there should be such an one in every village, no matter how small), which order the patient should be allowed to take to any medical man he chooses. The great distance some are obliged to send, the time occupied in procuring the requisite assistance, endanger, if not destroy, many a life. The plan I have suggested would, I imagine, be generally approved by the profession, and would, I am certain, be regarded as a blessing by the poorer classes. Another advantage to be derived from such an arrangement is, that tenders would be unheard of, and the evil of canvassing guardians unknown, without in the smallest degree increasing the expenses of the unions, as the same stipends or fixed payments per case, now adopted and allowed to certain medical attendants, may with equal justice be applied generally, and the parties held equally responsible to the guardians. I will not trespass longer on your time and patience, although much more might be advanced in favour of the proposed system. I will, therefore, conclude the subject, trusting it may find some strenuous advocates amongst my brother practitioners.

I remain, Gentlemen,

Yours obediently,

J. F. H. R. W.

June 25, 1842.

UNIVERSITY OF EDINBURGH.

Mr. Miller has been elected to fill the chair of surgery, vacant by the death of Sir C. Bell.

OBITUARIES.

M. Pelletier, the discoverer of sulphate of quinine, died at Paris last week.

We also have to announce the death of M. W. Edwards, member of the Institute, which took place on the 23rd instant at Versailles.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, July 22, 1842.

J. Winship, W. Langston, F. Spicer, W. Mc Neece, W. Jackson, A. Hingston, C. W. H. Howell, H. H. Parrott, W. T. Boddy.

Monday, July 25, 1842.

E. G. Woolnough, J. J. Tweed, W. R. M. Griffin, O. H. Fox, W. Ettringham, R. Hood, D. T. Lewis, W. Wood.

APOTHECARIES' HALL.

Licentiates admitted Thursday, July 21, 1842.

E. S. F. Arnold, South Sea House; W. Adams, 39, Finsbury-square; E. Seppings, Swaffham, Norfolk; B. Barkus, Newcastle-upon-Tyne; R. Sissons, Hull; W. Almond, Leeds; C. F. Curtis, Kennington.

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TO CORRESPONDENTS.

The communications of *Mr. Griffith*, *Mr. Oswald*, *Mr. Storrs*, *Mr. Valentine*, and *Mr. Collyns*, have been received.

A. B.—Practice of Medicine, *Dr. Gregory* or *Dr. Craigie;* Surgery, *Mr. Druitt's* Vade Mecum; Physiology, *Mr. Mayo* or *Dr. Carpenter;* Chemistry, *Dr. Turner;* Medical Jurisprudence, there is no good English school-book.

A Medical Student, Bristol.—We have made inquiries at the College. If our correspondent present himself for examination before January, 1843, he will fall under the regulations of 1835; if not, those of 1842 will apply to him, but he must present a special memorial to the council; the answer will, in all probability, be favorable to his views.

A. F. will find an answer in our advertising columns.

We have been compelled to omit several communications until next week.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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CASE OF AMAUROSIS SUCCESSFULLY TREATED; WITH REMARKS.

By Henry R. Oswald, F.A.S.E., &c.

On the night of June 27, 1839, W. D., Esq., banker, in Douglas, aged fifty-two, was suddenly attacked with total blindness. He sent for me about two, a.m., of the 28th, when I found him sitting up in bed, straining and rolling about his eyes in search of the light. The pupils of both eyes were much dilated, and looked darker and more brilliant than usual. He felt no pain, except a slight uneasiness across the eyes and forehead, and along the nose. Upon a lighted candle being held close to the eye, he said he was sensible of nothing but "total darkness." Skin cool and natural; pulse not accelerated, but rather full; tongue white and loaded; manner composed, and mind collected.

On further inquiry, I was informed that my patient had retired to bed about eleven o'clock, in good spirits, and free from every apparent exciting cause of the disease, and that about one o'clock, or some time after it, Mrs. D. was aroused by Mr. D. making efforts to grope about the bed, and complaining that he did not know where he was; but he immediately recognised his wife's voice and manner. Mrs. D. could not, however, make him comprehend that he was in his own house and bed-room; and when I arrived, he repeated to me that he was not only blind, but could not recollect anything at all about where he was, the locality of his bed-room, the form of the room, or of the house generally, with the exception that he was aware that the bank was below stairs, but in what part of the house he could not say. In every thing else his mind was quite collected, and he was particularly anxious about preparing the bank accounts for a public meeting, which was to take place in a few days. I take particular notice of this peculiar loss of memory regarding the locality of places, because it has proved an interesting symptom of the case in all its stages, and has been concomitant with the most prominent symptoms in their greatest degree of severity, as well as in their progress towards amelioration.

In reference to the predisposing causes of this attack, I found that Mr. D. had been, for fourteen days or more, unusually inattentive to the state of the primæ viæ, troubled with erratic pains in various parts of the body, and complained of loss of appetite and foulness of tongue; his breath was often offensively fœtid, and it is very probable that his anxiety to have his banking accounts ready for the general audit, which was near at hand, might have had some effect as an exciting cause. I found also that for many years he has been very subject to catarrhal affections, which have had a strong tendency to occasion a pink-colored suffusion of the tunicæ scleroticæ ever since he had the small-pox when a boy, by which he is severely marked. About ten years ago he first began to be sensible of a permanent weakness or falling off in the power of vision, and occasionally to see objects imperfectly, for which he began the use of spectacles, and has continued them ever since without interruption. About three years ago he experienced a dangerous attack of the influenza then prevalent, which impaired his general health, and left him less able for active exertions, both in mind and body, than before. His habits of life have always been very regular and active. It may be added, that besides the pinky tinge of the scleroticæ, some observers have remarked his having a mode of straining and winking the eyelids, especially when he had a catarrhal affection. Such being the history of the case, I shall proceed to give an abstract of the method of treatment pursued for its cure.

I immediately took upwards of a pound of blood from the arm, administered six grains of calomel and six of scammony, and directed the patient to use a hot mustard bath for the lower extremities as soon as possible, and a stimulating application of tincture of camphor and sulphuric æther to the forehead and temples. Six hours afterwards, when his bowels had been evacuated by the purgative, an emetic mixture, containing the tartarised antimony and ipecacuanha, was exhibited, which, being slow in operating, a teaspoonful of powdered mustard was administered with excellent effect. At mid-day, 28th of June, ten leeches were applied to the temples, and the calomel and scammony were repeated soon after, with directions to assist their operation by a dose of castor oil in the evening if necessary. By these means the primæ viæ were well cleared out the first day of the attack; and as my patient complained much of thirst and nausea, and foulness of the mouth and palate, effervescing draughts, made of the volatile alkali and citric acid, were prescribed to be taken every hour, in order to obviate the necessity of loading the stomach with much liquid, and to mitigate the febrile heat of the surface, which set in towards evening of the first day.

June 29. Has passed a restless night; no improvement of symptoms; alvine evacuations extremely fœtid, and mixed in color; the saline effervescing draughts are found very refreshing. Repeat the calomel and scammony immediately, and in four hours carry the dose off by the infusion of senna and sulphate of magnesia; cupping glasses to the neck.

Seven, p.m. During the cupping, which lasted half an hour, and by which about one pound of blood was obtained, the pupils of both eyes were observed, for the first time, to contract on being exposed to a strong candle light. Having had no sleep since the attack,

let him have seventeen grains of compound powder of ipecacuanha at bed-time.

30. A tolerable share of sleep during the night, but with a good deal of jactitation; little or no change of symptoms; loss of appetite complained of; tongue white and loaded; a sense of obtuse pain is more felt across the forehead and eyes, and in the nasal bones; he also complains of a smarting sensation and stiffness in the palpebræ. A pound of blood to be extracted from the temples by cupping. A draught of infusion of senna with sulphate of magnesia.

Seven, p.m. During the cupping, Mr. D. fancied he could distinguish the light of the windows from darkness, and pointed in that direction. A blister to the neck, and to have the compound ipecacuanha powder at night.

July 1. Passed another tolerable night, but with a good deal of restlessness in his sleep. This symptom of restlessness has been most remarkable after each evacuation of blood, whether topical or general; mouth tainted with the mercurial fœtor; the aperient draught not having operated well, a purgative enema was administered this morning with an excellent effect; complains of urine being scanty. To have a solution of tartrate of potass frequently; omit the effervescing draughts.

2. Contractile power of pupils evidently improve, and he is certain now of being able to distinguish light from darkness. Apply the leeches again to the temples, and a blister to the forehead and fontanelle.

3. Blister has operated well; continue it on for twenty-four hours; pain in the forehead and nose much relieved; has no appetite for food, and takes nothing but oatmeal gruel, and tea and toast. Let him drink a light infusion of colomba root three times a-day, and use the zinc collyrium for the smarting heat in the palpebræ, which is much complained of. To have four grains of blue pill at night, to be followed by a black draught in the morning.

6. Urine more abundant. A blister behind the ears.

7. Symptoms of improvement in vision not decided; a draught of rhubarb, magnesia, and ginger, mixed up in peppermint water, with twenty drops of the sal volatile, is found to act on the bowels better than either the black draught or castor oil; alvine evacuations considerably improved. Repeat the opening draught every day.

9. Symptoms of foul stomach being still most complained of, omit the infusion of colomba, and exhibit an emetic.

10 Emetic had an excellent effect, and he is more comfortable to-day. Our patient feels in no way reduced in strength by the frequent active evacuation he has been subjected to; on the contrary, sensations of better health and increased energy return.

11. Repeat the leeches to the temples, and apply another blister there. Our patient can now distinctly see the window and the pattern of the bed-curtains, and is certain that the female figure at the foot of the bed is Mrs. D., but has to survey the outline of the features of the face one by one in detail before he can be certain—that is to say, his vision embraces only one feature, or one part of the figure at a time, and thus he proceeds till he has gone over as many of the features as enables him to recognise the object, —as if a small portion of the retina only was sensible to light. Has great difficulty still in comprehending the form and locality of his bed-room, and the relative position of it to the rest of the house, but begins to recollect something about it, such as that his razor-case is in a particular drawer in his dressing-table; is not sensible of any other of the intellectual powers being injured, and converses with perspicuity on other subjects, giving clear directions to his clerk relative to making up the books and accounts of the bank for the audit of the directors. About this time—that is, about fourteen days from the first attack—he signed his name tolerably well; can see writing on a paper, but cannot decipher it.

Henceforth my patient continued to convalesce steadily in the general as well as local symptoms of his disease; but I did not fail to follow up, without interruption, the plan of cure which had hitherto been attended by partial success. The blisters were repeated every fourth day alternately to the forehead, neck, and shoulders, and behind the ears, the latter being placed partly on the cheek, with the view of acting on that portion of the fifth pair of nerves that ramifies on the cheek towards the eyes and their integuments. The mercurial affection of the mouth having disappeared, a blue pill was given twice every week, and his aperient mixture every day.

20. Has enjoyed a more generous diet for some days with advantage. Tongue and mouth now quite clean; vision considerably improved; and likewise that portion of his memory which relates to the geography of places. The improvement goes on by degrees, and almost imperceptibly, but is more particularly evident from the operation of a blister. Thus, from being able to distinguish light from darkness only, which took place on the 2d of July, the fifth day of the disease, he became able to distinguish the window after a few days; then the window-frame and other objects in the room; then, after some time longer, he began to see parts of the houses on the opposite side of the street, yet he could not recollect who their inhabitants were until reminded of them; then, after some days, he began to recognise persons in the street at a distance, but at all times with a good deal of uncertainty and want of confidence in being correct, especially towards evening. This uncertainty continued for many weeks; when he was able to walk out he had considerable difficulty in recognising persons and houses, and it was interesting to see him making a fresh survey of objects with which he was perfectly familiar before his illness, as if he had never seen them before; and he not unfrequently walked into the pantry instead of the drawing-room. It was the same with scenes out of doors; he had to make himself acquainted with them by degrees; he could converse about some of these with precision from memory, as far as regarded the property of them, but on walking out could not recognise them again. This symptom, I have no doubt, originated to a certain extent in the retina not being able to embrace an extensive object within the sphere of vision. Having so examined things in detail, he made slow progress in surveying large objects, and became puzzled before he had completed a survey of the whole.

Sept. 10. Even at this date, although sufficiently recovered to take a direction and management in

banking concerns in an accurate and clear manner, the difficulty he has in recognising external objects is still considerable—for instance, when he meets an acquaintance suddenly, or close at hand, he becomes puzzled, and some moments elapse before he makes out who he is; but if an acquaintance approaches him gradually, and in good light, this difficulty does not occur. This may partly be owing to the imperfection of sight caused by the veil or mist which still obscures his vision; but as it has appeared probable that much of the difficulty arose from some parts of the retina being more insensible to light than others, so now it is evident that the abductor muscles of the eyeballs are in a considerable degree inactive and insensible to the will. There is no strabismus in the case, but when the eyes are directed to an object, they obey the will slowly and with a want of precision, which in itself alone must occasion a considerable difficulty in surveying external objects, more especially minute ones, as papers, and such like things, mixed up together in a desk, of which he now makes a daily complaint. It is now recollected that, long previous to his blindness, Mr. D. had a manner of straining and winking the eyelids, more especially when under the catarrh, which caused the pink effusion in the tunicæ sclerotic æ.

Oct. 10. Has been using the cold shower bath every morning for the last month, and the following tonic pill every forenoon and evening:—

Sulphate of iron, two scruples;
Sulphate of quinine, one scruple;
Extract of aloes, sixteen grains;
Galbanum, one drachm and a half. Divide into forty pills, two twice a-day.

These means are decidedly useful to his general health, and also to his vision. Excepting a slow recognition of external objects, and the dimness which in a small degree still obscures his vision like a veil or mist, especially towards evening, he now experiences as little inconvenience from his eyes as he has done of late years. To omit the pills, and take sulphate of quinine drops instead.

Nov. 10. Since the beginning of this month, Mr. D. has given up the use of medicine nearly altogether, and also the shower-bath. He is considerably reduced in flesh, but is in active health, and has an excellent appetite. The imperfection of vision, which he calls a veil or mist over his sight, and the slow recognition of objects, are becoming less and less. It is our intention to resume the shower-bath soon, and should any of the symptoms threaten a return, to repeat the topical bleeding and blistering.

Feb. 25, 1840. Throughout the winter Mr. D. has gradually improved in his general health and strength, and excepting some slight occasional changes, his eyes have improved also, so that he has been able to attend to business uninterruptedly, and with his usual alacrity; but the dimness of sight has not altogether disappeared. During the last few weeks he has observed occasionally one eye to be more obscured than the other; and it is worthy of notice that the eye (the left one) which formerly suffered most from catarrhal affections is now the best eye. During the last few days, also, he has complained more of foulness in the mouth, impaired appetite, and general irritability of temper relative to trifling things, than he has done for many months. He suggests himself that he would be benefited by an emetic. To have

Tartarised antimony, two grains;
Ipecacuanha, fifteen grains;
Solution of acetate of ammonia, one ounce;
Syrup, half an ounce;
Water, three ounces. For an emetic.

Repeat the purgatives.

27. Emetic operated very copiously, relieving the stomach of a load of bilious mucus, and has been followed by a decided improvement, locally as well as generally.

May 10. Mr. D. continues in excellent health, and has gained flesh as well as freshness of countenance. His sight is now almost quite as good as it was for many months previous to the attack of amaurosis in June, 1839.

I have been thus particular in detailing the symptoms and progress of Mr. D's case of blindness, because I think they illustrate some points of pathology that must be interesting to every professional reader. Without any prolix reference to recorded cases of amaurosis, I may, perhaps, be permitted to suggest the inquiry whether the symptoms in this case do not imply the existence of more than one cause of disease acting on the nervous system of the eyes. For example, either extravasation or congestion, or both, occasioning pressure on that portion of the brain which gives origin to, or comes in contact with, the thalami nervorum opticorum; or congestion or effusion in the retina itself. 2ndly, a paralysis of the same parts as well as a paralytic debility of the muscles of the eyeball, particularly of the abductors; both of which must have, in a great degree, originated in the sympathy that exists between the nervous centres and the villous membrane of the primæ viæ. The obscure pain in the forehead, and the partial loss of a quality of the mind—such as memory—both more referable to the brain generally, than to the disease of the organs of vision in particular, appear to me to prove that the anterior portion of the cerebrum itself was seriously injured in this case. It is, I believe, generally admitted by pathologists that a paralysis or collapse of any particular nerve may take place, and that such may be the cause of amaurosis. Hence, another inquiry suggests itself—viz., whether a portion of the medullary substance of the brain, or the whole of it, may not become affected by a kind of paralytic collapse, more or less complete, similar to that which takes place in the medullary substance of the nervous chords in other parts of the body? Or thus, if a nerve is known to be subject to paralysation, why may not the brain be so?

From what I have observed in the foregoing case, I am inclined to reply in the affirmative to this last question. In conducting its treatment, I had leisure and opportunity to study every symptom during its protracted course, and it appears to me that the methodus medendi in a great measure explains the ratio symptomatum; and, were this hypothesis established, many anomalous difficulties that occur in the pathology of cerebral affections would be more or less explained—for instance, those that occur in cases of lunacy, idiocy, dotage, coma, and in many cases of fever, cholera, &c., in which post-mortem examinations fail to illustrate the causes of the diseases, when

no organic lesion or changes of structure are discovered by dissection. But if we admit that the brain is liable to paralytic collapse, as well as the nerves in other parts of the body, great changes of function will occur without either inflammation, organic lesion, or extravasation, having previously taken place, and the nature of the case may be explained satisfactorily without them. The length to which these remarks have extended prevents me from entering into the ratio symptomatum; but I cannot at present resist the conclusion that, under all the circumstances of this case, the total loss of sight, the partial loss of memory—a quality of the mind referable to the encephalon—the beneficial action of repeated blisters and other remedies, justify me in thinking that a portion of the brain itself was in a state analogous to paralysis, from which the patient recovered.

Douglas, Isle of Man, July 26, 1842.

CASE
OF
UTERINE POLYPUS DURING CONCEPTION, AND OF SHORT FUNIS.

By William Collyns, M.R.C.S.

Case I.—Mrs. L., aged 32, mother of nine children, and expecting her confinement for the tenth time, sent to me on the 22d of November, 1838, being, as she supposed, in labor. I found her suffering from uterine pains, which came on at short intervals, and were rather severe; there had been at first a considerable gush of blood, but no other premonitory symptoms. On examining *per vaginam*, I could not find the os uteri, which, from the very prominent size of the patient, I conjectured lay toward the sacrum beyond my reach. The pains having continued during several hours, without increasing in violence, I gave her an opiate, which had the effect of arresting them, and then I left her. I was again called to the patient on the 3rd of December; as I was from home, my son went in my place. He found the woman laboring under very severe pains; the os uteri partially dilated; the membranes ruptured; the liquor amnii draining away, but no profluvium, and the head presenting naturally as the pains continued, without producing any effect on the progress of the child. After six hours he gave a dose of the ergot, and repeated it in half an hour. The pains now became very violent, but the labor made no progress, though the head was low in the pelvis. At mid-day on the 4th my son sent for me, and thought I should bring my instruments, though, as he said, no apparent cause existed for their use; I saw her at four, p.m., when more progress had been made, and in about an hour the expulsion of the fœtus took place naturally, followed by that of the placenta. Our patient went on favorably, till the evening of the sixth, when she again had uterine pains, and was suddenly unable to pass her urine, assuring me she was about to give birth to another child. I had, of course, satisfied myself at the time of her delivery that there was no second fœtus, although I thought the uterus was rather large at that time, and certainly it did not subside as it ought to have done; supposing, therefore, it might now be pressing against the neck of the bladder, I again examined *per vaginam*, and found a large substance partly there, and partly within the uterus; the lochial discharge was natural, but as the bladder was much distended, I passed a catheter and emptied it; immediately after this had been done, she had a severe pain, and on assisting her, a considerable sized body was expelled, when she became quite easy, and said she was entirely relieved. On examining the expelled substance, I found it was an organised tumor, of an oblong form, which had been attached to the uterus by a sort of neck, of about two inches long, the size of one's finger, a regular membrane investing the tumor everywhere, except at the apex of the neck; it was perfectly solid throughout, looking like flesh, with several small arteries and veins running through its substance; it measured sixteen inches in length, and eleven in circumference, and weighed two pounds and a quarter; it was, in fact, a polypus uteri. On reflecting on the history of the case, it seems probable that the tumor existed in the uterus previous to the last conception; that it occasioned the first attempt at expulsion, and was then probably partially detached from the uterus; it could not have been entirely so, as it was not expelled till a fortnight after, and was not at that period at all decomposed; it, no doubt, occasioned the labor to be so protracted at last, and it is strange that it was not entirely detached during the progress of the labor. The woman got perfectly well, but she says her size is much less than it was after her former confinement, two years ago.

Case II.—Mrs. S., aged forty, mother of fifteen children, in the seventh month of her pregnancy with the sixteenth, having always had natural and safe labors, was suddenly seized, on the 15th of October, 1838, whilst in bed, with alarming hæmorrhage from the uterus, without any pain, but causing her to be very faint. All the usual remedial measures were directed for her—the recumbent position, perfect rest, cooling drinks, &c., when, at the end of a week, she was as well as before. On the 1st of November the hæmorrhage recurred with several large coagula, and without any pain. The same measures were resorted to with the same result; but there was a large secretion of milk in the mammæ, one of which became indurated and inflamed. Leeches, cold lotions—the usual treatment—were had recourse to without success. A milk abscess formed, and on the 18th of November it was punctured with great relief; there was no hæmorrhage after the 1st until the 13th, when it again recurred, apparently without any cause, and without any pain; it ceased as suddenly as before, but it occasioned me much uneasiness, as I felt assured that it was one of those very alarming cases where the placenta is attached over the os uteri. I, therefore, told her husband what I thought, and enjoined the greatest possible care and attention, as well as a perfect state of quiescence; but on the 29th the bleeding recurred, with great prostration of strength; on the 15th of December it again returned, and again on the 29th. The period of her gestation being now nearly terminated, I remained about and near her, with much anxiety, when, on the 3rd of January, I was summoned, and found that labour had commenced. There had been a considerable gush with the first pain, which had ruptured the membrane but there was then no hæmorrhage; and on mak

an examination I was delighted at not finding any placenta near the os uteri. The head was presenting; the labour was quick and natural; and, on the expulsion of a thin but healthy child, the whole cause for our previous alarm was very satisfactorily but unusually explained. The child was expelled, together with the placenta, by the last pain, when I found the funis was so very short that the abdomen of the child appeared to be almost in contact with the placenta; in fact, the cord was not quite *six inches* long, and I had some little difficulty in putting the two ligatures on it. Never having met with any case like this, during an extensive practice for thirty-five years, I have stated it, in order to afford one gleam of comfort to my professional brethren, when uterine hæmorrhage occurs in the latter months of pregnancy, since what has occurred once may occur again.

Kenton, July, 1842.

POISONING WITH OPIUM.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—If you think the following case worthy of insertion in your Journal, I shall be glad if you will give it a place. There are two or three points in it which deserve remark: the near approach to death of the little patient; its early age for mechanical treatment; and the recklessness of the mother in giving it so large a dose of opiate—a practice which is, I fear, but too common in the class to which she belongs; and the complication of the symptoms with teething—a condition requiring attention in the after treatment.

Your obliged servant,

Robert Storrs.

Doncaster, July 22, 1842.

About six o'clock in the evening of July 4, Catherine Doyle, aged seven months, was brought to my surgery apparently in a dying state. She was cold and pulseless, with livid lips and dusky countenance; eye-lids half closed; the globe of the eye upturned; pupils contracted; there was great stupor. It was stated by the mother, who came with the child, that as it had been restless for some time, she had been advised to give it a little laudanum, and had consequently given it about half a teaspoonful in the forenoon. At noon, when her husband came home, he thought it looked very ill, but the mother dared not tell him what she had done, as she began herself to think that she had done wrong. In the afternoon she also became seriously alarmed, and was advised by one of her neighbours to take the child to the dispensary, whence it was brought to me. It was then in the state above described. I saw there was no time to be lost, as it seemed to be in a dying state. I determined, therefore, to try the stomach-pump, and in lieu of the ordinary stomach-tube, which was, of course, much too large for so young an infant, I adapted to the syringe the largest elastic gum-catheter I had, and found it serve the purpose required very well. I injected into the stomach about a pint of warm water, having in solution two grains of sulphate of zinc, and brought the whole of it back again; for before I had finished withdrawing the fluid, spontaneous vomiting came on, and the stomach was entirely emptied; the fluid returned, smelling strongly of laudanum.

As soon as this was done, and the tube withdrawn, the child's head fell, and I supposed it was dead. By artificial respiration, however, putting the child into a hot bath immediately, applying stimulants to the nostrils, &c., sensation and respiration returned. After a short time the pulse began to be felt, and in about an hour the child seemed to be much better, except that it was in a state of great exhaustion. It was now put into warm flannel, and placed in a child's cot in my nursery, where I left it for a time under competent superintendence. I had not long left the house before the child was seized with a violent convulsion. I was soon sent for, when mustard plasters to the feet, hot bottles, &c., were applied, and as I found it was cutting two teeth, I lanced its gums, and subsequently applied a leech to the forehead. From this time it gradually recovered, and was able to be removed home about eleven o'clock, p.m. The mother was requested for some hours not to let it sleep long at a time; and in the morning, when I called, I found the little patient quite restored.

LUXATION OF THE TIBIA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—The attention of your readers having been recently drawn * to the subject of luxations of the knee-joint, the remarkable discrepancy of authors in describing the position of the leg in the dislocation backwards, has been brought under notice. In the following case, the leg was at right angles with the thigh, and the ligament of the patella was *not* torn—in these points differing from each of the opposite conditions of the limb, mentioned by Sir A. Cooper and Boyer (*vide* Cooper's Surgical Dictionary, seventh edition). As it is probable that the circumstances which occasion these varieties, and the comparative frequency of each variety, will only be determined by the multiplication of individual instances, may I, on this ground, beg the insertion of the following notes?

Your obedient servant,

Thomas T. Griffith.

Wrexham, July 27, 1842.

January, 1821.—I was called to S. Evans, aged forty, of spare habits, but strong muscular frame. Whilst at work, above a very large wheel moving in connection with a steam-engine, he had fallen on its edge, and had been forced doubled through an incredibly small space between the wheel and a wall. The scalp was severely lacerated and contused; the interspinous ligament of the fifth and sixth dorsal vertebræ was torn through, and the head of the tibia was thrown behind the femoral condyles; the leg was at right angles with the thigh; the patella closely set on the trochlea, and its ligament on the full stretch, but not ruptured. After several ineffectual attempts at reduction, I proceeded in the following manner:—The man lay on his back, with the nates on the edge of

* See the Nos. for May 14, June, 11 and 18.

the bed. I stood in front of the knee, with a thick shawl passed around the head of the tibia and my neck; my hands rested on the condyles; the thigh was well fixed; an assistant was directed to carry the heel backwards, in order to free the anterior edge of the head of the tibia from the condyles, and at a given point, to *extend* the leg with a rapid sweep, whilst I drew the head of the bone forwards and upwards. In this way the reduction was immediately effected; the limb was laid in the extended position on a splint, and kept cool by appropriate applications; but little inflammation or swelling supervened, and within five weeks, the patient had so far recovered the use of the joint as to walk comfortably with the assistance of a stick.

SOME ACCOUNT OF THE OFFICE OF CORONER, AND THE PROCEEDINGS OF THE CORONERS' COURT,

WITH SUGGESTIONS FOR THE IMPROVEMENT OF THESE PROCEEDINGS.

By Martin H. Lynch, M.D.

In several of our counties and boroughs the office of coroner is now held by medical men; and, perhaps, the most important portion of the testimony taken at inquests is that given by the medical witnesses, who, owing to the usual promptness of procedure in the coroners' court, are enabled to give material evidence whilst the body is free from decomposition, or, at all events, in such a state as to be capable of furnishing a corroboration of correct views, or a refutation of incorrect opinions, as to the cause of death. Indeed, the facilities afforded for ascertaining whether the deceased has died in the course of nature or not, have co-operated with the agency of the jury and of a judge—now in all places, formerly in most places, elected by the people, and quite independent of the crown—in attaching a high degree of importance in the minds of the public to the proceedings on coroners' inquests—a character which they have not altogether forfeited, although it is pretty generally known that the inquiry has often been conducted in a very inefficient manner, in consequence of the ignorance, carelessness, or stupidity of the coroner, the jury, or the witnesses—nay, sometimes of all these parties. In fact, mere blunders and negligence are overlooked, because, it is well understood, the proceedings are so framed by law that it is scarcely possible a corrupt verdict should be returned.

Without further introduction, then, than this allusion to the prominent position occupied by members of the medical profession at coroners' inquests, we shall proceed to consider these inquiries, with the view of suggesting a few amendments in the legislation regarding them—amendments which, in our opinion, are urgently called for; and the plan we deem best calculated to exhibit any imperfections in the laws at present in force, and to point out the means of improving them, is the following:—We shall, in the first place, give some account of the mode of conducting investigations as to the cause of death in England, France, and Scotland, especially with a view to the methods adopted in each country of employing the aid of medical science; and, secondly, prepared by the previous steps, we shall enter into a comparison of the course pursued in these countries, and endeavour, upon this comparison, to found some suggestions for the improvement of the laws of England, that have reference to proceedings of this kind.

In England, the office of coroner is of very ancient date. Some have said, it is coeval with that of sheriff; but, however this may be, it is certain there were coroners in the time of Alfred, for that king punished with death a judge who sentenced a party to die upon the coroner's record, without allowing the prisoner liberty to traverse. The office is also mentioned by Athelstan, in his charter to Beverly. The first Act of Parliament referring to it is that De Officio Coronatoris, 4th Edward I., A.D. 1275. And it is in virtue of this act that the existence of the coroners' court is rendered essential, and the jurisdiction of its judge exercised; for although some of the duties imposed by it on the coroner are, in the present day, never performed by him, it has never been repealed, and the bills relating to this subject, passed in subsequent reigns, merely defined the meaning and intentions of this statute, or added to the efficiency of the coroners' court, by providing that the proceedings instituted by it should be honestly and diligently conducted.

That the office of coroner did not exist amongst the ancient Britons, is sufficiently proved by the preamble to the statutes of Wales.* The preamble proceeds thus:—"Whereas the Divine Providence, which is unerring in its own government, among other gifts of its dispensation, wherewith it hath vouchsafed to distinguish us and our realm of England, hath now of its favor wholly and entirely transferred, under our proper dominion, the land of Wales, with its inhabitants; we, therefore, under the Divine will, being desirous, &c., * * * * * * * * * * * have caused to be rehearsed, before us and the nobles of our realm, the laws and customs of those parts hitherto in use, which, being diligently heard and fully understood, * * * * * * * * * * * some thereof we have allowed, and some corrected, and we have likewise commanded certain others to be ordained and added thereto."

Under the latter head (of additions to the existing laws of the principality), the statute enacts that there be sheriffs, coroners, and bailiffs in the Welsh counties, and that "the coroners shall be chosen by the king's writ, the tenor whereof is to be found among the original writs of the Chancery."

Hence, it can hardly be doubted, the office and laws of coroner must either have been introduced into England by our Saxon ancestors on their first arrival, or have had their origin at a subsequent period of the sway of the Saxon princes, and predominance of the Saxon race.

At a remote period the office was one of considerable dignity, and the coroner was required, during the early part of the Norman rule, to be a knight; but, by the statute (28th Edward III., c. 6, A.D. 1355), it was enacted simply that the coroners

* 12th Edward I., A.D. 1284.

"should be of fit and lawful persons." It was then, however (notwithstanding this clause), expected that the coroner, although not knighted, should have sufficient property in land, in the same county, to qualify him for knighthood. Now, we believe, hardly any inquiry is made as to the income of the candidates for the office.

There are three kinds of coroners—1st, *Virtute officii;* these are the chief justice of the King's Bench, and the other judges of that court. 2nd, Coroners by charter, commission, or privilege, are those who, being in certain liberties or franchises the heads thereof, or appointed by the heads, are empowered by charter to act as coroners. Thus, formerly, the chief magistrates of many boroughs were entitled to hold inquisitions in person or by deputy; these heads of corporations held office only temporarily, and, during their tenure of office, might change their deputies as often as they pleased. 3rd, Coroners for counties, who are "chosen in the full counties by the commons of the same counties," and hold their situation for life, being removable solely for incapacity or gross misconduct.*

The Lord High Admiral is a coroner of the second class, being empowered by patent to act in that capacity, and to appoint coroners within his jurisdiction, who are usually the Judge-marshal of the Admiralty or his deputy. Formerly the "heads" of many boroughs had vested in them similar powers; these, however, have been taken from them by the Municipal Corporation Act, 5th and 6th William IV., c. 37, which enacts that in boroughs, where a separate court of quarter sessions is held, the town council shall elect a coroner, who shall send to the Secretary of State a yearly return of the inquests held by him.

In England, the number of coroners for each county is not fixed by law, the Lord Chancellor being entitled to issue a writ for one or more additional coroners on a petition of the freeholders of a county; but, in the Welch counties, and the county palatine of Chester, in pursuance of the statutes 33rd Henry VIII., c. 13, and 34th Henry VIII., c. 26, there are two coroners.

According to the statute 4th Edward I., the jurisdiction of coroners extended to several other inquiries besides those as to the cause of death—namely, inquiries as to treasure trove, accusations of rape, inquiries as to wrecks of the sea, and accusations of wounding and maiming; in fact, formerly the coroner discharged many of the duties now performed by justices of the peace and sheriffs. But when the coroner acted thus in a ministerial capacity, it was only as the sheriff's substitute; for instance, when exception was taken to the sheriff on the ground of partiality (from kindred or other circumstances), the coroner was then the officer to execute the king's writs.

At present, although the act of Edward has not been repealed, the coroner may be said to hold no other inquisitions than those as to the cause of death. Jervis quotes two inquisitions, of rather recent date, regarding treasure trove, one held on the 19th of December, 1735, by the coroner of Somerset, the other in 1826, in Cambridge, by the coroner of that town; but during a long period England has been undisturbed by foreign invasion or civil war, and there has been no occasion for the concealment of valuable property under such circumstances, as were of frequent occurrence in troublous times. Hence it is most probable, if tranquillity should happily continue, inquisitions of treasure trove will in future hardly be considered within the range of the coroner's department.

At one time the coroners of counties and franchises had no right to hold inquests on bodies found within the verge of the sovereign's residence—i. e., within a circle described by a radius of twelve miles from the court as a centre; but in the year 1311 it was enacted that the coroner of the county or franchise should, with the coroner of the household, hold inquests on bodies found within the verge.

Notwithstanding enactments passed but a few years ago to define the limits between the jurisdiction of the Admiralty on one side, and that of coroners of counties or boroughs on the other, the difficulties that existed have not been quite removed, and it is by no means easy to mark out clearly the line which separate, their respective fields of authority. By statute 15, Richard II., c. 3, the Admiralty was allowed jurisdiction concurrently with the coroners of counties, of "the death of man, and of maihem, done in great ships hovering on the main stream, in great rivers only, below the first bridges near the sea." The Admiralty has jurisdiction in matters within the duty of coroner, arising upon the open sea, between high and low water-mark, when the tide is in; but the coroners of counties or burghs have sole authority within these bounds when the tide is out. The Admiralty, however, is altogether excluded from interference in bays or harbours, *infra corpus comitatus,* which are such that one shore may be seen from the other, or, according to some such, that one may distinctly perceive from one side what is done on the other. For the purpose of further providing for the sure punishment of crimes against the person, committed within the jurisdiction of the Admiralty, it is enacted by the 9th George IV., c. 31, that "when a person stricken, poisoned, or otherwise hurt upon the sea, shall die on shore, proceedings may be instituted as if he had been stricken, poisoned, or hurt in the county, borough, franchise, within which he died."

When the Admiralty and the coroner of a county or borough have concurrent jurisdiction, *he* has a sole right to hold the inquest who first seizes the body.

The act 6th and 7th William IV. is that which fixes the remuneration of medical witnesses, and specifies those who should be summoned as such; it enacts that "whenever, upon the summoning or holding of any coroner's inquest, it shall appear to the coroner that the deceased person was attended at his death, or during his last illness, by any legally qualified medical practitioner, it shall be lawful for the coroner to issue his orders in the form marked A in the schedule hereunto annexed, for the attendance of such practitioner as a witness at such inquest; and if it shall appear to the coroner that the deceased person was not attended at or immediately before his death by any legally qualified practitioner, it shall be

* Coroners for counties have not, and never have had, the power of appointing deputies, but it has been thought that such power was possessed by the coroners of franchises. Jervis, however, doubts the legality of appointing deputies in any case. Probably the deputies in boroughs were appointed by the *heads* of the corporation, and not by the coroners.

lawful for the coroner to issue such order for the attendance of any legally qualified medical practitioner, *being at the time in actual practice in or near the place where the death has happened;* and it shall be lawful for the coroner, either in his order for the attendance of the medical witness, or at any time between the issuing of such order and the termination of the inquest, to direct the performance of a post-mortem examination, with or without an analysis of the contents of the stomach and intestines, by the medical witness or witnesses, who may be summoned to attend at any inquest; provided that if any person shall state upon oath before the coroner, that in his or her belief the death of the deceased individual was caused partly or entirely by the improper or negligent treatment of any medical practitioner or other person, such medical practitioner or other person shall not be allowed to assist at the post-mortem examination of the deceased."

By the same act it is declared that if a majority of the jury should think the evidence of the medical witnesses examined in the first instance unsatisfactory, they have the power to name to the coroner in writing any other legally qualified medical practitioner or practitioners, and to require he or they should be ordered by the coroner to perform a post-mortem examination, with or without an analysis of the contents of the stomach and intestines, and the coroner is declared guilty of a misdemeanor if he refuse to issue such order.

The fee allowed by the act to the medical witness is one guinea for evidence as to symptoms, &c., without post-mortem examination, two guineas for evidence as to symptoms, with post-mortem examination and chemical analysis.

This statute further declares, that "if a person dies in a public hospital or infirmary, or in any place or building thereto attached, or in any county or other lunatic asylum, or in a public infirmary, or other public medical institution, whether supported by endowments or voluntary subscriptions, then no officer of these institutions, whose duty it may have been to attend the deceased, has any claim to remuneration under the act.

The coroner pays the medical witness immediately after the inquest, and is reimbursed out of the county rates or borough fund.

By the act 10th George IV., c. 37, a sum not exceeding five pounds was allowed to be granted to any medical witness in Ireland; but by the 6th and 7th William IV., c. 116, the highest sum allowed was reduced to three pounds. In other respects, we believe the laws of Ireland relating to the office of coroner are identical with those of England.*

After the witnesses have been sworn before the coroner and examined, they *must*, if required, sign their depositions after these have been read over to them; but their recorded testimony is evidence without the signature.

When a prisoner is tried at the assize court for inflicting an injury that caused the death of any person, the death-bed deposition of that person is admitted as evidence. But the death-bed deposition of the other witnesses is not admitted.

We are inclined to think that this acknowledged and positive principle of our laws would be applied to the coroner's inquisition, and that that portion of it which is the testimony of a deceased person will be received as evidence only when the deceased has been the injured person, and conscious of the approach of death when he gave his testimony. We have endeavoured to ascertain this point positively, by referring to Jervis and Phillips on the Law of Evidence, &c.; but these works contain no information on the subject.

Originally the coroner, like the sheriff, discharged his duty without receiving more than the mere expense of travelling, as the office was deemed one conferring dignity on him who held it, and it was expected it would be an object of ambition to independent landed proprietors. By the statute of Westminster, the coroners were forbidden to receive remuneration, under pain "of great forfeiture to the king." But even a short time after the passing of this act, they continued to receive the penny granted for "every visne when they came before the assize court, as appertaining to their office, for and towards their travail, attendance, and charges." So that it is evident the statutes of Westminster were never strictly enforced, for the receipt of this penny by the coroner was evidently contrary to the act, although the celebrated Sir E. Coke says it was not, supporting this view by an absurd quibble, "that they took it not for doing their office, but as a right due to their office, which might have a reasonable beginning." The statutes of Exeter also (A.D. 1214) forbid the coroner to receive any fees.

By statute 3rd, Henry VII., c. 1 (A.D., 1488), it was enacted that a coroner shall have for his fee, upon every inquisition taken upon the view of a body slain, thirteen shillings and fourpence of the goods and chattels of him that is the slayer or murderer, if he have any goods; and if he have no goods, of such amercements as shall fortune any township to be amerced for the escape of the murderer. The township was not amerced for the escape of the murderer, when its officers and inhabitants had used due diligence in the pursuit of the criminal; and, strictly speaking, the fine could not be levied unless when there had been a special finding that the murderer had escaped, and the township had neglected pursuit by hue and cry. But in practice it is usual, when the murderer has fled, and left no goods, that the constable or parish officers should pay the fee when there has not been a special finding, as by this means a considerable expense is saved.

It appears that the limiting of the fee to cases of murder had an injurious effect, by holding out an inducement to neglect inquests on bodies of persons killed by misadventure, or to receive remuneration contrary to law; for by the first Henry VIII., c. 7, it was enacted that no coroner should receive compensation for doing his duty, under pain of a fine of forty shillings.

By the 25th George II., c. 29, it was enacted that a coroner is entitled, for every inquest duly taken, to the sum of twenty shillings, and ninepence a mile for travelling expenses, but this ninepence cannot be

*The law requires that Irish coroners should be possessed of a high property qualification, but, we believe, it is not enforced, or is evaded.

charged for returning home; the coroner can charge solely for the number of miles between his residence and the place of inquest. This charge of twenty shillings for each inquest, and of ninepence a mile travelling expenses, was allowed by the act only to coroners of counties; other coroners had merely the same fees that used to be paid before the passing of the act, and whatever allowance might be granted them by those who appointed them. By the 7th George IV. the coroner is directed to commit to writing the evidence, or as much of it as may be necessary, and also (as are the jurors), to sign the inquisition.

The evidence thus recorded may be made use of in a court of justice, where either the prosecutor or the accused may demand that it should be read, that the jury may have an opportunity of judging of the credibility of a witness by comparing his evidence on the inquest with that on the trial. If the witness be dead the coroner's record of his testimony at the inquest will be evidence admissible on trial; but it cannot, if he be alive, take place of oral testimony.

If the justices at quarter sessions refuse a coroner's fees on the ground of the inquest not being duly taken, the Court of King's Bench will not interfere, unless the justices have exercised their judgment with an undue bias, as the court considers them the proper parties to decide whether the inquest has been duly taken or not.

We have given briefly the laws relating to the office of coroner on all points that are of most importance to medical men in general; but we have of necessity (owing to limited space) omitted some subjects that should be familiarly known to any member of our profession who intends at some future period to become a candidate for the office—for instance, the necessity of proceeding upon the view of the body, the duty of jurors, the legal principles that the coroner has occasion to explain in his charge, the forms according to which summonses should be drawn up, and the mode of recording the proceedings. For information on these topics we refer to Mr. Jervis's work, from which we have derived a large share of the information contained in the preceding part of this paper.*

Hume, in his work on Criminal Jurisdiction in Scotland, says that "the office of coroner, though now unknown to our practice, is specified as a subsisting and necessary office in the ordinance of Edward I., *super stabilitate terræ Scotiæ*, and he frequently makes his appearance in the oldest records of the Justice Ayres." Hume then quotes two "entries," the first from the record of the Justice Ayre (assize court), held at Jedburgh, 31st October, 1502, and the second made in a royal precept bearing date 12th April, 1504.

It is to be observed, however, that Hume, writing a work on Criminal Jurisdiction in Scotland, and, of course, sparing no trouble in making his researches complete, has not been able to collect entries bearing date anterior to 1502, and that these have reference to border districts; taking these circumstances in connection with the fact, that the only other record referred to by this legal writer is the ordinance of Edward I., a detested conqueror, who, having completely reduced Scotland, imprudently irritated a proud and patriotic nation "by attempting (as an historian says) to abolish Scottish laws and customs, by destroying their monuments of antiquity, and by endeavouring to bury in oblivion the Scottish name, and merge it in the English," we think it highly probable that the office of coroner did not exist in Scotland before the *complete* conquest of that country by Edward in the years 1303-4, that his ordinances were too quickly followed by the revolt of Robert Bruce in 1306, by his own death in 1307, and by the defeat of the English army at Bannockburn in 1314, to admit of the office of coroner being established *even* temporarily in *all* the counties, and finally that it must have been soon after the defeat of Bannockburn abolished in the few counties in which it had a temporary existence.

The coroners of the border counties must have (it is most probable) been appointed at another period, when national animosity did not run so high as in the reign of Edward, and when, consequently, the office was more likely to be borrowed from the English. Its very partial introduction—into a few counties only—is not surprising when we consider how little of uniformity or order prevailed in the government of Scotland in these days.

The office of coroner has, at all events, long since fallen into disuse in Scotland, where the inquiry, analogous to the inquest, is called a precognition, which consists in examining witnesses who were present at the commission of the crime, but not upon oath, as to what they know of the facts and circumstances thereof, and taking their signed declarations, in order to know if there be ground for a criminal process, and how to libel the indictments or criminal letters exactly.

Although it is not usual to examine the witnesses on oath, and they are entitled to demand that their declaration should be cancelled, yet in practice their declarations are not cancelled, and the magistrate may, and sometimes does (in the case of prevarication, for instance), question the witness upon oath; but the declaration of the witness cannot be read at the trial, nor there made use of against him, by asking if he gave a different account at the precognition.

Should a witness suddenly die between the taking of the precognition and the trial, so as to allow no time for the taking of a death-bed deposition, his evidence is, in all cases, practically lost to the prosecutor. We believe, however, the death-bed deposition is not admissible at all as evidence, unless when it is made by the person injured, as in the case of rape, &c.; and the grounds of its rejection are, that it is taken in the absence of the accused, and without an opportunity for cross-examination.

The evidence taken at a precognition is not submitted to a jury. The presiding magistrate is the sheriff-depute. The justices of the peace may preside, but they generally decline interference except in the steps preparatory to the precognition. The witnesses on the precognition must be examined separately; but an exception to this principle was established by the trial of James Harkness for murder

* Wilcock does not make any allusion to the proceedings of the coroners' court in his work on the Laws Affecting the Medical Profession, published in 1839.

(April 3, 1797), when it was, *inter alia*, objected to John Mc Kenzie, a medical witness, that he had attended at part of the precognition. It was answered that it did not signify whether this witness were present at the examination of the other witnesses on the precognition or not, as he was only called to be examined *professionally* as to the state of the body of the deceased, and not upon any facts or circumstances prior or posterior to the murder charged. The court, in this case, repelled the objection, and allowed the witness to be examined.

The prosecuting officer on a precognition is the Procurator-fiscal, who receives his appointment by commission from the King's Advocate for Scotland.

Should the high sheriff neglect to appoint a sheriff-depute, the Court of Justiciary may nominate him.

At the precognition, the medical witness gives in his report in writing, and at the trial he reads this report, verifies it on oath, and may be cross-examined upon it.

The French proceeding, analogous to the inquest and precognition, is termed an *instruction*, which signifies the collecting of all the proofs of crimes. The written record of the instruction is called a procès-verbal.

The prosecuting officer on these preliminary investigations is the *Procureur du Roi*, who is himself deputy to the *Procureur General*. One of the first is resident in each chief town, and the latter in Paris.

The presiding magistrates are the *juges instructeurs*, who are appointed by the crown for three years, but may hold their office longer. They preside over the preliminary investigation, and send their report to a tribunal termed the *Chambre de Conseil*, which determines whether or not there are sufficient grounds to detain the accused, and (if there be) commits him to prison.

The juge instructeur usually proceeds upon receiving a requisition from the Procureur du Roi, but this requisition is not necessary. The Procureur du Roi examines the witnesses, and, assisted by the mayors and inferior officers of police, prepares the procès-verbal. Each witness is sworn, and is required to affix his signature to his deposition. If a medical witness be examined on matters of fact only—for instance, as to the symptoms, or the position and nature of a wound examined by him before death, he takes the same oath as the other witnesses. But if a medical man be examined on scientific points merely, he is sworn to give his opinion honorably and conscientiously. If the medical witness be examined as to *facts*, and also on scientific points, he is required to take both the oaths. There is no jury upon an *instruction*.

The *Procureur du Roi* can issue a warrant of arrest against the accused, and summonses to compel the attendance of witnesses.

The *juge d'instruction*, as well as the *Procureur du Roi*, is under the surveillance of the *Procureur General*, who is himself subject to the *Cour Royale*.

If the juge d' instruction considers the investigation imperfect or faulty, he can order a fresh inquiry, or any clerical errors in the procès-verbal to be corrected.

The evidence given on the *instruction* is received as evidence on the trial, when either the prosecutor or the accused may demand it should be read; but the part of the *procès-verbal* being the written declaration of any witness, cannot be read until his oral testimony has been delivered.

Should a witness die between the completion of the *instruction* and the commencement of the trial, his written declaration taken at the *instruction* is admitted as evidence.

The portion of the *procès-verbal* which is the strictly scientific or professional report of any person examined on the *instruction*, is admitted as evidence, and a copy of it allowed to be sent with the jurors when they retire; and this is permitted even when the reporter has also been examined as to mere occurrences connected with the crime. But the written declarations of the mere witnesses at the *instruction* cannot be sent with the retiring jurors, although they may be read on the trial.

GENERAL REMARKS.

Before alluding to the comparative merits of the different modes of procedure, we beg to direct attention to the points in which they resemble and differ from each other. The coroner's inquest resembles the French *instruction*, as applied to cases of murder or homicide, inasmuch as the witnesses are in both countries examined on oath, and the record of their evidence is admissible on the trial. But the *instruction* differs from the inquest in several ways, of which the following are the principal:—1st, It is conducted without the aid of a jury. 2nd, The medical evidence is given in the form of a written report, and the portion of this record which refers to *scientific or professional opinions* is not only evidence on the trial, but a copy of this part is taken away by the jurors when they retire. 3rdly, If a witness dies between the completion of the *instruction* and the commencement of the trial, his evidence on the instruction is admitted as evidence on the trial.

The precognitions of Scotland differ from the coroner's inquest and from the *instruction* in this—that the witnesses are not usually examined on oath, and may demand their declaration should be cancelled, and that the recorded evidence of the non-medical witnesses cannot be used at all as evidence on the trial. The precognition resembles the *instruction*, because the testimony of the medical witnesses is given *in writing*, and is admitted as evidence on the trial. *Moreover*, the precognition differs from the coroner's inquest, inasmuch it is conducted without reference to a jury.

The medical reports received on the precognition in Scotland, and forming a part of the French *procès-verbaux*,* have done so much to advance the science of legal medicine, and in this point of view so much excel the medical evidence recorded in the coroner's inquisition, that it has been very generally supposed by medical men, that the French mode of procedure is is in every respect superior to the English; and we have ourselves abandoned this idea only after a very minute examination of the details of the respective inquiries in England and France. The placing in juxta-position the points of difference and resemblance between the inquest and *instruction*, must suggest too many reasons for preferring the English mode

* An *instruction* signifies the collecting of all the proofs of crimes. The written record of the *instruction* is called a proces-verbal.

of procedure to render it necessary that more should be said, than that the aid of a jury and the supervision of an independent judge elected by the people, give the inquest a vast advantage over the *instruction* of the French, whilst the corrective influence of the jury, the admissibility of the evidence on the trial, and the examination of the witnesses on oath, appear capable of making it much more effective than the precognition of the Scotch.

But notwithstanding this superiority, it appears to us that the mode of proceeding in the coroner's court may be materially improved in some respects; and, indeed, this is almost evident from the simple statement we have made of the mode of conducting the inquest and investigations analogous to it. Nor would the amendments, we think advisable, be such as to change the general principles which have hitherto governed the inquest, whilst they would add much to its efficacy and correctness.

When barristers, engineers, or, indeed, even tradesmen are asked for opinions having reference to their respective sciences, professions, or handicrafts, they usually, indeed it may be said universally (if these opinions relate to points of importance, not to say of great difficulty), require time, consider the subject carefully, and give, as the result of mature deliberation, a written opinion, report, or estimate. Now medical jurisprudence is by no means an easy, simple, and elementary branch of medical science. It is, in fact, the application of a correct bedside knowledge of disease, and of the various accessory sciences (as chemistry, physiology, &c.), to questions raised in courts of law; and these questions are often so difficult, that it requires most extensive knowledge and deep reflection to reply to them satisfactorily. Surely a *vivâ voce* examination is not calculated to elicit the nature, and the degree of certainty, of the scientific opinions, or scientific knowledge, that may be safely applied to such points. On the other hand, a written report, carefully drawn up, verified on oath at the inquest and trial, and the groundwork of cross-examination on both occasions, would, we presume, be deemed the mode in which to gather scientific opinions which so frequently determine the question of life or death; and what objection can be offered to the taking of these written reports? They would not prevent cross-examination; nay, they would favor it; for the law should ordain that the medical report should not merely contain a statement of facts regarding wounds or disease, with the scientific or professional conclusion of the witness, but should state the grounds on which that conclusion may be formed—for instance, should detail the various steps of the chemical experiments made the basis of the final and important inference, or set forth the general pathological or physiological principles from which it has been deduced. This report would furnish materials for a cross-examination, which would be well-calculated to show whether the witness be a person intimately and practically acquainted with the particular department of science. Thus, in the event of a chemical analysis, the witness should state the different steps of the analysis performed by him with the view of detecting the presence of poison, how often he had performed such previously, &c.

At present the coroner is required to commit to writing as much of the evidence as is material. Should the law be altered so as to admit medical evidence in the form of a written report, he might also be required to forward a copy, or the originals, of the medical reports to some office in London (or in London, Dublin, and Edinburgh), where they should be kept and submitted freely to inspection. Thus would be formed a valuable store for the future improvement of medico-legal knowledge. Besides the free inspection and criticism, by medical editors and the profession generally, of these deliberately-drawn-up reports would, for obvious reasons, contribute to insuring the most skilled witnesses in each case (an end that could hardly be accomplished by direct legislation), whilst the expense would not be considerable.

The coroner is allowed by law to summon the medical attendant or attendants who had seen the deceased before his death; and when the deceased has not been attended by any medical man, the coroner is allowed (with certain very proper restrictions) to avail himself of the aid of any medical man he pleases, whilst a majority of the jury has, in all cases, the power of summoning additional medical witnesses. Now, the power thus given to the majority of the jury should (in our opinion) also be granted to the coroner, who should be entitled, independently of the jury, to command the attendance of additional medical evidence. The majority of a jury determining the necessity of additional or more correct medical testimony, may, possibly, *all* have been frequently jurors on inquests; but this is not likely; one or several of them may be very young, inexperienced, or ignorant; indeed, we know that often they must be neither intelligent nor well-educated. It can hardly, therefore, admit of question, that the coroner, daily perhaps presiding over inquests, selected as the judge to conduct such inquiries, is, or ought to be, more capable of detecting the errors or deficiencies of the medical witnesses, and determining the propriety of having additional professional evidence. But, whilst this power should be granted to the coroner, it should not be taken from the majority of the jury, whose possession of it may, in some instances, ensure the impartiality and strictness of the inquiry.

But the law, thus defective regarding the summoning of medical witnesses, requires amendment in another point—respecting their remuneration. The medical man is entitled to a guinea for evidence as to symptoms, the nature of the disease, or wound, &c.; in fact, for a mere exercise of memory; whilst for the great additional labor of a post-mortem examination and chemical analysis no more additional remuneration is granted (in England) than the very inadequate sum of one guinea! Were any medical men consulted previous to the drawing up of this act? We are inclined to answer this question in the negative; for one can hardly suppose the framer of the bill was aware, that to perform a minute and careful post-mortem examination occupies much time (sometimes two or three hours), and requires a correct knowledge of the anatomy of health and disease; the framer of the bill cannot have known that each of the numerous organs or important parts is submitted to careful examination; an examination capable not only of ascertaining its state as a whole, but of revealing the condition of every portion of its interior; at the same

time that the medical man must mentally connect the morbid appearances with the symptoms observed during life, in order to furnish himself with data for his inference. Will any one venture to assert that one guinea is a sufficient remuneration for so tedious and difficult a process, performed (as it should always be) by a man of experience and extensive knowledge?

Again, should a chemical analysis be required in addition to the post-mortem examination, the law will not allow any additional remuneration at all! It is clear that the preparer of the bill never reflected that in very many instances the analysis is a very compliplicated process, involving numerous evaporations, filtrations, &c., necessarily occupying considerable time, and deserving implicit credence as a correct scientific conclusion, only when it has been performed by a skilful analyst, in the daily habit of performing chemical experiments, capable of ascertaining the purity of all the tests used by him, and able to form certain conclusions from the colors or properties of the various precipitates. How unjust, how absurd to expect such an inquiry to be well and satisfactorily conducted without any remuneration!

Let any unprejudiced individual make himself acquainted with the real nature of a careful post-mortem examination, as performed by a fully competent person, and with all the steps of a trustworthy chemical analysis, and we are convinced he will be inclined to do justice to the medical profession, and admit that we are not unreasonable in asserting that the law should sanction the following scale of payment of the medical witness:—One guinea for evidence as to facts,—for the mere exercise of memory; three guineas for evidence as to facts and post-mortem examination; and five guineas for the above, including a chemical analysis requiring but a short stay in the laboratory for its due performance. The coroner should be allowed a discretionary power of increasing this sum from five to eight guineas in cases requiring a very tedious and difficult analysis.

We had intended to make one or two other suggestions for the improvement of the proceedings of the coroner's court; but these refer to points which have not by any means the importance of those we have disposed of; we must, therefore, defer a consideration of them to another opportunity, as this paper has already proceeded to a much greater length than we had intended.

3, Charles-street, Rutland-gate, Hyde-park,
July 22, 1842.

PURE WATER.

Mr. Hawes gave notice on Saturday for a select committee to inquire whether the various companies supplying water to the metropolis have effectually filtered and purified the same, according to their engagements to Parliament and the public; and whether the water supplied may not be and ought not to be improved. (Early next session.)

M. Cruveilhier, professor of the faculty of medicine, and M. Begin, principal surgeon of the Val de Grâce, have been nominated officers of the Legion of Honor of France.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, AUGUST 6, 1842.

Lunacy being a disease of very frequent occurrence in Great Britain, affecting all ranks of society from the pauper to the peer, the study and proper management thereof become questions of the highest importance to the medical profession, and to the community at large. Yet, strange to say, in no class of maladies to which the human frame is liable has so little been done in this country, either to explain the pathology or to point out the remedial measures best adapted to alleviate, when unable to cure, this distemper, which is truly the greatest calamity afflicting humanity on this side the grave. Considering the excellent opportunities for studying insanity existing in England, particularly in those benevolent institutions for the reception of the insane, now met with throughout the kingdom, and so creditable to the philanthropy of our countrymen, it is sincerely to be hoped that the well-founded reproach often cast upon the generality of English medical practitioners, of their being less conversant with mental diseases than French or German physicians, may soon be removed; and that our medical literature respecting insanity may vie with any productions issuing from the presses of either France or Germany. Much undoubtedly remains to be accomplished, but a spirit of inquiry is abroad, and considering what has been effected in the improvement of prisons, to say nothing of the many benevolent institutions of which England can so justly boast, no one can view as a matter of indifference any effort made to improve the helpless condition of lunatics, or hesitate to promote measures having a tendency to instruct those under whose care they are usually placed.

It was therefore that we took occasion to notice in a recent number the pamphlet of Dr. Webster, on the admission of medical pupils to the wards of Bethlem Hospital, for the purpose of studying mental disease, in which that important question is fully discussed. We quite concurred in many of his suggestions, and expressed our satisfaction that the matter had been brought forward by the author; but it is singular so little attention has been hitherto paid to the subject, since the student can only obtain practical experience and knowledge in the management of mania, by attendance at the bedside of the patient and from clinical instruction; for, to use the words of the author—

"This is the only true way to acquire knowledge; and it would be as absurd for an amateur traveller to pretend to speak with authority regarding the customs of a foreign country, or the character of its inhabitants, merely from any second-hand knowledge he may have

acquired during closet tours, with a book in his hand, as for a physician to undertake the treatment of an important class of diseases, without having previously seen patients laboring under the particular malady he is called upon to attend. To adopt any other course, would be quite as irrational as if the student were to attempt to learn anatomy without dissecting the human body, or to understand the great principles of chemistry entirely from books, unaided by actual experiments."

Believing, therefore, that all the institutions for the insane, supported by the public, ought to be made as extensively useful as possible, consistent with the chief objects for which they were established—namely, the present comfort and recovery of the inmates—when any proposal is made to render lunatic asyla subservient to the promotion of medical education, it is only sufficient to show that no serious consequences are likely to ensue from the judicious admission of medical students to visit the patients along with the attending physicians. On this point, experience is preferable to any reasoning, however ingenious or apparently humane; and as the system pursued in France and Germany is very different from that followed in this country, reference need only be made to the results observed, for instance, at the Salpêtrière, in Paris, or at the Bicêtre; and on this point, in addition to the experience of Dr. Webster, besides others, better evidence cannot be required than the remarks contained in a letter which that able physiologist and learned physician, Dr. Combe, of Edinburgh, has written to Dr. Webster, and published in the pamphlet alluded to. We quote the document at length, as it appears conclusively to settle the question at issue. Dr. Combe says—

"The safety and even advantage to the patients, from the admission of pupils, is fortunately not a matter of mere conjecture. I had the good fortune to attend the first clinical course ever given on the subject of insanity, by the celebrated Esquirol, at the Salpêtriére, at Paris, in the spring of 1819. I anticipated confusion and excitement, from the indiscriminate admission; for all pupils who chose to attend went round with Esquirol, when he visited the patients before lecture. There was no restriction whatever, except that he occasionally went into a cell with only one or two of the clerks, where he thought the crowd would excite too much. But instead of that, the patients seemed amused and interested, and during the whole three months, I never saw one instance of any excitement, or other unfavorable result. On the contrary, the visit was expected with pleasure by many, and Esquirol's kind, friendly way of addressing them, and then turning round, to make a good-natured remark to the students, had a manifestly soothing and beneficial effect. Of course, the students behaved with propriety and good-humored forbearance also, and consequently were not regarded with the suspicion which used to be excited in the olden time by the admission of visitors, who come to stare as at wild beasts. The number of students who went round with Esquirol at that time averaged from thirty to fifty, and no confusion of any kind occurred. I visited Charenton and Ivry with Esquirol in the autumn of 1831, and up to that time he gave the same testimony concerning the advantages, to both patients and pupils, from the above plan; and I believe, at Bicêtre also, clinical lectures have been given, and students freely admitted for some years. I have devoted much attention to insanity ever since I attended Esquirol's clinique in 1819, and every day's experience has added to my conviction of the necessity, even for the advantage of the patients, of admitting pupils to our asyla, under proper regulations. The attending physician would, of course, prohibit access to any who might in his opinion be injured by it, just as is done in the case of acute diseases in ordinary hospitals. If there was any chance of an overflow of pupils (an unlikely thing in my opinion), it would be easy to divide them into several classes, each to have admission to certain wards only. It is no advantage to a student to have scores of patients under his eye at the same time. Infinitely more instructive is it, to confine his observations to such a number as his mind can easily embrace, so as to digest and comprehend their peculiarities. To benefit by his opportunities, he must not only observe, but think and compare, and in doing so the physician may help him most efficiently by a few judicious remarks."

If arguments like these do not carry conviction to the minds of those who may still doubt the propriety of admitting pupils to the wards of insane asyla, under proper regulations, we fear neither reasoning nor experience will ever avail in inducing the sceptical to try the experiment.

In the metropolis, the two great public establishments for the reception of lunatics are Bethlem Hospital and St. Luke's; and if either of these institutions were opened to students, like Guy's or St. Bartholomew's, for the purpose of investigating diseases of the mind, much benefit would accrue, and the anomaly now complained of would no longer exist. The former of these charities being pre-eminent for its excellent arrangements, and having extensive wards, containing generally from 320 to 350 patients, is an institution admirably adapted for the purpose of obtaining instruction; and being principally intended for the reception of insane patients, who are considered of a curable description, although not exclusively so, since there are likewise incurables, and criminal lunatics, it possesses many advantages, for the purposes of study, over other establishments in which every description of lunatic patients, whether curable or otherwise, are received.

But although the principle of permitting pupils to visit the insane patients in Bethlem Hospital, along with the physicians, has already been partially established, the application of the rule is of too limited a description to be of considerable benefit, as only three are allowed; and the expense being much beyond the pecuniary means of most medical students, the number is not always complete.

Again, at St. Luke's, where upwards of 200 lunatic patients are constantly under treatment, no pupils are admitted, although one of the objects proposed at the foundation of that charity, according to the original address in 1751, was "of introducing more gentlemen of the faculty to the study and practice of one of the most important branches of physic." Farther, it is stated in the preface of a work, published in 1758 by Dr. Battie, one of the physicians to that hospital, that, "by an unanimous vote, the governors signified their inclination of admitting young physicians, well recommended, to visit the hospital, and freely to observe the treatment of the patients confined." Moreover, the same author also says, he "offered to the perusal of the gentlemen, who honored him with their attendance, the reasons of those prescriptions which were submitted to their observation." These are important facts connected with the subject of admitting pupils to the wards of St. Luke's; and why the above resolution of the governors is not acted upon at present it is difficult to explain. But as two new physicians have been recently elected to that hospital, who cannot be wedded to old habits, or to the system of exclusion now acted upon, we hope the time is come when more liberal measures will be introduced at St. Luke's, and that they will assist in opening the doors of that institution to the younger members of the profession—thus acting in conformity with the spirit influencing their learned predecessor, Dr. Battie.

At Hanwell a great step has already been made in advance towards rendering public insane institutions subservient to the advancement of medical education; and the excellent example there set by Dr. Conolly ought to be followed at every county asylum or public insane hospital of the kingdom, because, if even a limited number of pupils were admitted, and clinical instruction given at each of these institutions, the aggregate number of those who would in that way gain practical experience on insanity would be very considerable; and we do think that immediate steps ought to be taken to bring about such a desirable consummation. But if more pupils should be admitted, for example, to the wards of Bethlem Hospital, beyond the present limited number of three, the fees of admission ought to be made more moderate than at present, and commensurate with the pecuniary means of the generality of students, as few are able to pay fifty guineas for one year's attendance, which we understand is the sum now required from those permitted to see the medical practice of that hospital.

We could say much more upon the important subject introduced to the notice of the medical profession by Dr. Webster in his pamphlet; but the question is of so ample and momentous a nature, that we must defer to another occasion any further remarks, which we might feel disposed to make, or the paramount importance of the subject he has mooted truly demands. In the mean time we will only add, that the pamplet of Dr. Webster deserves the serious perusal of his medical brethren, and of the governors of lunatic asyla and similar institutions.

THE ROYAL COLLEGE OF SURGEONS AND MEDICAL REFORM.

No sooner was it generally understood that Sir James Graham intended seriously to consider the question of medical reform, and endeavour to reduce the chaotic condition into which the sundry medical corporations have thrown the profession, than suddenly the corporations set about reforming themselves, all at once displaying the most apparent zeal for the interests and welfare of their members and licentiates. Amongst the most prominent of the twenty trading institutions in medical and surgical degrees, which adorn the history of medicine in these kingdoms, none was more extravagant in its movements than the Royal College of Surgeons; and, accordingly, no time was lost in announcing, through the mouth-pieces of the College, that the most liberal enactments were forthwith to be conceded in favor of a large portion of the members. A number of *fellows* was immediately to be made, and invested with extraordinary powers; the council of the College was to be increased to double or treble its present number; the Court of Examiners was also to undergo a similar augmentation; and all members of the College, who were not licentiates of the Company of Apothecaries, were to be eligible to the highest offices in the corporation, and were to have a voice in all its affairs. Other intended acts of liberality towards the members of the College, by the self-elected one-and-twenty, were roundly asserted to be all but completed; and, as if in ratification of these proceedings, tea-parties were given within the very walls of the College, to which all the members were invited without payment, and the urbanity and condescension of the self-elected upon these occasions were strikingly characteristic of the whole.

When, after repeated interviews with Sir James Graham, that distinguished statesman found it more difficult than he had imagined to deal with the question of medical reform in an honest and upright manner, and at the same time to preserve any of the extraordinary powers with which the irresponsible members of the council of the College of Surgeons in London have invested themselves, he very prudently deferred the farther consideration of the question until the next session of Parliament; and no sooner is this determination of Sir James Graham known, than all the promised reforms are put in abeyance, and the scanty privileges about to be conceded to the members are scattered to the winds. The intended *fellows* are no longer thought of—the augmentation of the council is looked upon as a chi-

mera—and as for increasing the members of the Court of Examiners, it is now spoken of as never having been seriously contemplated. Now, this chicanery, although not uncommon in the movements of the council for the last few years, will not do at the present time; and there are many long heads in the council who know it as well as we do.

The members of the College, great and small, should bestir themselves during the recess; and if changes are proposed to be made in the constitution of the College in anticipation of the proceedings in Parliament next session, in reference to medical reform, those intended alterations should at once be demanded to be made known, and the opinion of the members at large be expressed upon them. There never was a more favorable opportunity for the members of the College of Surgeons to demand a participation in the affairs of their College than at present; and as a refresher to their memories, we reprint the following extracts from the report of a public meeting of the members of the Royal College of Surgeons, held at the Freemasons' Tavern, on Feb. 18th, 1826, at which twelve hundred were present. Mr. Lawrence having taken the chair, on the proposal of Mr. Tyrrell—

Mr. Lawrence—"Looking at the early charters, we find that the management of the art of surgery was entrusted to a master or governor, assistants, and the commonalty; by which latter expression, I am to understand the general body of members of the College. The members at large are not recognised as possessing any connection with the administration of the affairs of the College. They have no voice in the election of the ruling powers of that institution; they have no control over the expenditure of its funds."

Mr. Tyrrell—"They (the council) have the power of electing their own members, if a vacancy occurs. They have the power of doing what they please with their own funds, and not one member of the College has a right to ask them how the money account stands. Any man may come to London from the country, or from any other part, practise as a surgeon, and perform the most important operations, and yet the College of Surgeons have no power whatever to enable them to interfere or to restrain him."

THE QUEEN'S HOSPITAL, BIRMINGHAM.

A meeting of the council, governors, and subscribers of the Queen's Hospital was held in the chapel of the institution on Thursday last, for the purpose of confirming a code of rules and regulations for the internal government of the charity.

The Right Honorable the Earl Howe, who was accompanied by Lady Georgiana Curzon and Viscount Curzon, arrived by railway from his seat, Gopsall-park, about half-past ten o'clock, and was received by W. Sands Cox, Esq., the honorary secretary, Dr. Johnstone, the respected president of the Royal School of Medicine and Surgery, and a large number of gentlemen connected with the hospital.

Lord Howe, having been called to the chair, read to the meeting the code of laws, which had been drawn up and carefully revised by the committee, and which he thought would meet with the approbation of every gentleman present. His lordship then proposed that the rules be confirmed, which was unanimously agreed to.

The noble chairman next adverted to a subject of great importance as respected the success of the hospital as a school for clinical instruction, and in which, in common with other noble friends of the institution, he felt a deep interest; he referred to the establishment of a college for the students, in which they might enjoy the advantages of a domestic establishment and the benefits of moral and religious superintendence. A plan of this kind had been much discussed at the King's College, London, of which he had the honor to be a directing councillor, and had received the approbation of the Bishop of London, to whom the matter had been submitted. Great difficulty, however, was experienced in procuring a building suitable for the purpose, the whole of the apartments in Somerset-house, which had been thought of in the first instance, being occupied with government offices. Having himself witnessed the evils of the liberty given to young men when removed from their parents, while a member of the University of Edinburgh, he was deeply impressed with the importance of securing so desirable an object as the establishment of a college for the students connected with the Royal School of Medicine and Surgery and the Queen's Hospital, and he should regard it as a very great honor if Birmingham should take the lead in this matter, and set an example to London and other large towns in the kingdom.

Dr. Johnstone said that a plan for carrying out the collegiate system had been laid before the Rev. Vaughan Thomas, and when the council received his answer, they should lose no time in consulting their liberal founder (Dr. Warneford) upon the subject. The great difficulty appeared to be the raising of funds for the purpose; but he was sure, from the interest which Dr. Warneford took in all that related to the prosperity and efficiency of the Royal School of Medicine and Queen's Hospital, that they might calculate upon assistance from that quarter. In a letter which he had addressed to Mr. Sands Cox a few days since, Dr. Warneford observes, "The incorporation of the school and the hospital as a society for the education of medical and surgical students—with the introduction of the collegiate system—will complete your great work, of which I most highly approve; indeed, I have long been convinced of its necessity, effectively to carry out my original but crude suggestions." Dr. Johnstone added, that when the council received the plans submitted to the Rev. Vaughan Thomas, and had matured their arrangements, the whole would be submitted to a general meeting at the latter end of August, when the subject would be brought prominently forward, and on which occasion they hoped to be favored with his lordship's presence and advice.

Lord Howe said he should have great pleasure in attending and giving every assistance in his power to carry out an object which he regarded as of such importance to the well-being and success of the institution.

Some general conversation ensued in reference to the management and superintendence of the medical pupils, after which a vote of thanks was passed to the noble chairman for his kindness in presiding, and the meeting separated.—*Birmingham Herald.*

RETROSPECT OF THE MEDICAL SCIENCES.

THEORY OF EXANTHEMATA.

According to the ancient humoral pathologists, the virus producing the exanthematous and other fevers is due to a fermentation of the animal fluids, the cause being some morbid matter in the blood. This morbific poison effects changes in the circulating fluid, whereby it is itself abundantly multiplied or reproduced, and the eruptive disease that ensues seems to be the mode provided by nature for the escape or expulsion of this newly-formed morbid matter from the system. These views, advocated by our ancestors, are nearly similar to those now maintained by Liebig, and which are founded on the secure basis of organic chemistry. Liebig ascribes the phenomena which succeed the introduction of certain animal poisons into the blood to a process exactly resembling fermentation. Yeast, which is added to sweet-wort to produce fermentation, is putrefying gluten, and its component particles are, therefore, in a state of intestine motion or transposition. The sweet-wort contains sugar and gluten; by the influence of the yeast, an intestine motion is communicated to the elements of the sugar, by which they arrange themselves into new and simpler forms—viz., into alcohol and carbonic acid, the gluten contained in the sweet-wort being reacted on by the fermentation of the sugar, and gradually converted into yeast, which, mingling with the liberated carbonic acid, rises and floats upon the surface of the fermenting liquid, thus furnishing a much greater quantity of yeast than that originally employed, and which has disappeared. In this way the virus of contagious diseases, which is formed out of the blood, causes a reproduction of the poison from the constituents of that fluid, and the transformation is not arrested until all the particles of the blood, which are susceptible of the decomposition, have undergone the metamorphosis. In diseases not contagious, arising from animal miasm, the process is similar to the fermentation of sugar, in the solution of which there is not any gluten present to reproduce the original disturbing agent.

In order, then, that the reproduction of the virus generated by a specific animal poison may be effected, it is requisite that there exist in the blood a principle analogous to the gluten in the sweet-wort, and this ingredient must have a definite relation to the given poison. If it be wanting, no reproduction of the poison takes place. If it be indispensably necessary to life, the poison that transforms and destroys it must be inevitably a fatal one. If naturally present, it is exhausted and destroyed, at least for a while, by the operation of the poison, and may never be replaced, or only after a long interval, thus explaining the very rare recurrence of an exanthema. In some persons it may never exist at all, or it may exist at certain periods only of their lives. It may even be acquired by unnatural or peculiar modes of living.—*Dr. Watson, Medical Gazette*, July 29, 1842.

ACTION OF CHLORITE OF SODA ON ARSENICAL SPOTS.

M. Bischoff, of Swickau in Saxony, has ascertained that the chlorite of soda possesses the properties of dissolving immediately the arsenical spots produced by the combustion of arseniuretted hydrogen in Marsh's apparatus, while it has no power over the antimonial spots similarly formed. MM. Chevalier and Labarraque, being desirous of testing the truth of this statement, prepared arsenical and antimonial spots, and also arsenico-antimonial spots, and having experimented with these, met with the following results:—The spots produced from arsenic, with Marsh's apparatus, disappeared directly they were brought in contact with the chloruret of soda, the antimonial spots not even changing color when brought under the action of the same salts. The compound spots of arsenic and antimony, when brought in contact with the chloruret of soda, lose a part of their color, owing to the solution of the arsenic in the chloruret, as was shown by removing it after it had acted on the spots, adding hydrochloric acid to it, and passing a current of sulphurretted hydrogen through it, when a precipitate of the yellow sulphuret of arsenic took place, the precipitate being soluble in ammonia.—*Journal de Chimie Médicale.*

ARSENICAL NICKEL.

M. Batilliat, a chemist, at Maçon, has found that several utensils employed in domestic purposes, are made from arsenical nickel, the *Kupfernickel* of the Germans, instead of copper; and he states his opinion that dangerous consequences may arise from the substitution of the nickel for the other metal. The arsenised metal is of a reddish yellow color, hard, and fragile. It is composed as follows:—Nickel, 3994.306; arsenic, 4880.510; cobalt, 16.22; iron, 86; antimony, 800.000; sulphur, 200.42. The cock of a wine cask made of this compound metal, when examined, had been acted on by the wine, and traces both of nickel and arsenic were found in the liquid.—*Ibid.*

SUBCUTANEOUS DIVISION OF THE TENDO ACHILLIS IN A CASE OF FRACTURE.

A woman, thirty-five years old, possessing a strong constitution, was admitted into the Hospital Saint Louis, under the care of M. Jobert, for a fracture of both bones of the leg. The fracture was a compound one, the upper fragment having penetrated the soft parts, and projecting an inch and a half externally; the foot was kept in a state of forced extension by the contraction of the muscles of the calf, in consequence of which the fracture could not be reduced. M. Jobert decided on performing the subcutaneous division of the tendo Achillis, by which means he was enabled to bring the foot into its proper position and to set the limb. The patient did well.—*Bulletin de Thérapeutique.*

UMBILICAL HERNIA.

M. Bouchacourt, surgeon to La Charité, at Lyons, performed an operation for the cure of exomphalos, in January last, on the person of a little boy, eight months old, on whom bandages, &c., had been tried unavailingly. The proceeding he adopted was that of his predecessor, M. Martin. The child was placed on its back, and the legs flexed on the abdomen; M. Bouchacourt then pinched up the projecting integuments, and having assured himself, by repeated manipulations with the thumb and forefinger, that no portion of intestine was then contained in the tumor, an assistant passed across it a needle armed with a double thread, which was

separated and tied above and below, a third being afterwards passed tightly around the base. The little patient did not appear to suffer much from the operation. Subcutaneous inflammatory tumefaction followed, and the sloughs separated in a few days, leaving a healthy-looking ulcer, bedewed with laudable pus, which gradually cicatrised. The hernia was not reproduced.—*Ibid.*

CATARACT.

M. Bonnet, of Lyons, recommends that the same plan for fixing the eye, in the operation for extraction of a cataract, should be adopted as for the operation for strabismus. He raises and depresses the upper and lower eyelids by means of specula, which are confided to careful assistants, who are directed not to press on the eye. A hook without a spring is next fixed in the conjunctiva above and external to the cornea, and a spring hook is next more firmly passed into the conjunctiva and subconjunctival fascia, a little above the external angle of the eyelids. This last hook is then confided to the assistant, who keeps the upper eyelid supported; the object being to fix the eye and prevent its being carried inwards. The operator then takes the specula on the lower lid in his left hand, and makes the section of the cornea with the keratotome. Sometimes the lens escapes immediately; if it does not, slight pressure on the upper part of the eye will dislodge it; it is rarely necessary to puncture the capsule. M. Bonnet says this operation should be seen to understand the facility with which it is practised. The iris is never wounded, nor, if the assistants are careful, does enough of the aqueous humor escape to flatten the eye. He adds that venesection is not an easier operation. M. Pétrequin has operated thus for cataract by depression.—*Journ. de Med. et Chir. Prat.*

CANCER OF THE LIVER.

M. Velpeau was consulted by a person, suffering from cancer of the lip. He recommended him to enter the hospital, where an operation was performed for its removal. Although it was a very slight operation, shiverings came on the next day, and the patient died the day after. On examination of the body, the liver was found riddled as it were with thousands of small cancerous swellings, similar to that on the lip, varying in size from a pin's head to that of a bean. We are ignorant in what way the globules of cancer act on the fluids of the body, but it is not impossible that there was some connection between the cancer which had been removed and that of the liver, causing the latter to take on an increase of intensity from the shock inflicted on the system. —*Ibid.*

CAUSE OF AMAUROSIS.

M. Le Calvi has published several cases of amaurosis in the "Gazette Médicale of Montpellier," in which the disease was induced by the habit of keeping the apartments darkened during the day time, so that on leaving home, the eyes are suddenly exposed to a painful glare. Amaurosis, he observes, is very common in the South of France, and is most frequently traceable to this cause. M. Le Calvi has found that, by attention to the hygienic measures naturally suggested by the cause of the complaint, a cure may be effected. Those who persevere in the pernicious habit of keeping their rooms dark, he advises to allow the light gradually to enter them, before they leave home, so that the organ may be accustomed to increased light, before it is exposed to the intense glare of the noon-day sun.

RUPTURE OF THE LEFT VENTRICLE OF THE HEART.

Dr. Bigger narrates the case of a gentleman, who consulted him in 1835, when he was laboring under incipient phthisis. For this he was ordered abroad, and Dr. Bigger afterwards met him at Malta. In addition to the symptoms of phthisis, there was the extraordinary peculiarity in this case, that at times the pulse would fall from 50 to 17 beats in the minute, and remain in this state for eight or ten hours. While the heart was pulsating at the slowest rate, a soft, gentle *bruit de soufflet* was heard after the first sound; this disappeared when the heart's action became accelerated, and returned to the normal standard.

Dr. Bigger's patient died suddenly, and on opening the pericardium, it was found to be full of fluid blood; on further examination, a ragged aperture in the left ventricle was found, with a portion of lymph projecting through it, which had evidently been forced out during the first rush of blood. On removing the coagulum, there were some appearances which seemed to be the result of ulceration—a breaking down and discoloration of the fibre. The lungs were full of tubercles, and there was a cavity near the apex of each.—*Dublin Medical Journal.*

ACTION OF CARBONATE OF POTASH ON GUM-RESINS.

Mr. Hulse states, that by triturating gum-resins with the carbonate of potash, and adding medicated or distilled water, an elegant emulsion may be obtained, nearly the whole of the gum-resin being retained in suspension. The carbonate is equally available in the preparation of certain pills, such as the pilula ferri composita, and the pilula galbani composita, the solubility of which is materially increased by the addition of the alkali. The last named pill he directs to be prepared by triturating the gum-resins, myrrh, sagapenum, galbanum, and assafœtida with the carbonate of potash in an iron mortar, until the whole is sufficiently reduced, when it is to be beaten into a mass with raw sugar, no liquid being required. The mass will retain its consistency for any reasonable period.

The solubility of gum-resins in water, with the aid of carbonate of potash, varies considerably. Myrrh is the most soluble, ammoniacum the next, sagapenum the third, while galbanum and assafœtida are but little assisted by it.—*Pharmaceutical Journal.*

NUTMEG LIVER.

There has long been supposed to be what is called a *gin drinking* liver, in which a section of that gland presents an appearance very closely resembling the section of a nutmeg. Mr. Kiernan has clearly shown that this peculiar aspect of the liver is produced by mere congestion of blood. Congestion of the liver is indeed very likely to arise under the daily stimulus of distilled spirits, but it arises under various other circumstances besides; and therefore it is not a safe test of the intemperate habits of the party. Of this we had sufficient evidence before Mr. Kiernan's observations were published. Again and again have I met with the nutmeg liver, strongly marked, when there was reason to believe that the possessor of it had never transgressed the strictest rules of temperance

in drinking; in young persons of both sexes, who certainly never had been dram-drinkers. Disease of the heart is a very obvious and a very common cause of hepatic congestion.—*Dr. Watson, Medical Gazette.*

EXOSTOSIS OF THE PELVIS OBSTRUCTING PARTURITION.

If the exostosis be small, and especially if it be attached to one of the bones forming the outlet of the pelvis, the practitioner should give the patient a fair chance of delivery by the natural efforts, particularly if the pains are vigorous and the fœtal cranium is not firmly ossified, but compressible, as in the case related by Danyau in his lectures. Burns quotes a case from Campbell, where from pelvic exostosis, the left parietal bone was so greatly sunk as to cause the eye to protrude; Professor Otto, of Breslau, mentions the case of a woman who had pelvic exostosis, being the mother of four children, in each of whom a small portion of the cranium was depressed, and not ossified. But if the surgeon determine to allow a full trial of the natural efforts, he must carefully watch his patient, lest her strength become exhausted, or lest rupture of the uterus take place. If the conjugate diameter of the pelvis will allow the introduction of more than three fingers, the forceps may be applied; and amongst the circumstances rendering their employment necessary, pelvic exostosis is mentioned by Mad. Boivin in her celebrated "memorial." If this instrument have been employed ineffectually, or if the conjugate diameter of the pelvis measures less than the breadth of three fingers, craniotomy must be had recourse to. Some writers have recommended the operation of turning to be performed; but although version may be accomplished, the difficulties arising in the delivery of the head will not be lessened by the alteration of the position of the child; and although more extractive force can be used, yet the force necessary to effect the delivery may not only cause the death of the child, but also occasion that of the mother, as in the case of Van Döveren, alluded to by Nagaele. Symphysiotomy, recommended by some writers, appears not to have been followed by success in the hands of those who have practised it; although Michell asserts, that after its performance the forceps may be applied, where previous attempts to introduce them have failed. Gardien states that, in exostosis of the base of the sacrum, impeding the descent of the fœtus, symphysiotomy is the only remedy whereby a living child can be delivered. If the exostosis be not discovered until the completion of utero-gestation; or if it be of large size, as in the extraordinary case of Dr. Haber, of Carlsruhe; or if it be so located as to prevent the introduction of the forceps; or if it be impossible to extract the child, even after the cranial contents have been evacuated, the only mode of delivery is by performing the Cæsarian section. Ruleau, Leydig, M'Kibbin, Spitzbarth, and Siebold, have performed the Cæsarian section in labours complicated with pelvic exostosis. But if we have the opportunity of ascertaining that such a tumor exists, which will prevent the delivery of the patient by the natural efforts, or by the employment of the forceps or vectis, or if its dimensions are such that perforation must be performed, or even the Cæsarian section itself may be necessary, it is most assuredly our duty to induce artificial delivery; the period of pregnancy at which the operation is to be performed depending altogether on the size and situation of the pelvic obstruction.—*Guy's Hospital Reports.*

ON GRATUITOUS MEDICAL SERVICES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN.—One of the great advantages of a weekly periodical is, that of exchanging ideas so rapidly, that it affords an agreeable substitute for discussion of subjects which may otherwise remain unknown and unnoticed.

The letter of Mr. Wilton, of Gloucester, in your number for July 16, 1842, page 302, on "Gratuitous Medical Services," is in such harmony with ideas which I have long entertained, that I have often been astonished the evil has not, before this, cured itself; it is quite evident, however, that the scattered opinions of a few individuals would avail very little in convincing those who have either never given the subject a thought, or are so influenced by prejudice or habit, that more extended views are not only fettered, but altogether unthought of. I am, therefore, fully aware that whoever embarks in any modification of the present system of gratuitous services in public charities, not only risks his own popularity for humanity and sympathy for those under poverty and disease, but also hazards the good opinion of many of his professional brethren, who may have so toiled for twenty years, to gain a point only perhaps obtained by comparatively few—namely, that of extensive experience, so as to ensure lucrative and successful private practice. This is, no doubt, a very laudable and a natural ambition; but I would ask, is it not possible that this desirable object may be obtained without a sacrifice of so long a period of profitless labor, and without consigning to oblivion the most distinguished talents, unless they are aided by untiring perseverance and indefatigable industry? I think it may, and should long ago have ventured to touch upon this subject, if I had not been buoyed up with the feeling that some legislative measure would afford the opportunity of remedying the evil; and I am not without hopes still that Sir James Graham's bill may admit of it. Be this as it may, I trust that the members of the Provincial Association will not fail to take up the point for consideration, and either directly or indirectly urge it upon Parliament.

It is well known to those members of our Lancashire district branch meeting, held at Newton upon the 7th instant, that I was drawn out upon this subject in connection with the benevolent fund, for the prosperity of which I hope I need not now attempt to enforce; at the same time I do consider that if we can adopt any measure which will render that sympathetic aid less needful, I conceive we are serving the same cause, and which I am confident remuneration for public services has a strong tendency to effect; for I believe it is a maxim now universally acknowledged, that "one shilling earned *by* a poor man will go as far as *three* given *to* him." In addition to the independent feeling which it engenders, this is no small recommendation for its preference.

I wish it fully to be understood, that nothing is further from my intention than the idea of slackening

the zeal evinced for the benevolent fund; and I trust I may venture to say that I will yield to no man in fulfilling all the duties which a medical officer is called upon to discharge when appointed to hospitals, dispensaries, and other such public charities. Our position in society requires it, and the community at large have a right to expect it; but in avoiding Scylla we are not bound to plunge into Charybdis; something is due to ourselves, and something, too, to the profession to which we belong; nor do I see why a medical man should make that sacrifice which no other individual in society will do to the same extent. But how is this, it will be asked, to be done? for it must be evident that no remuneration can be expected from a charity which can at all compensate for the time, talent, and perseverance which a medical officer must evince, to fill his situation with satisfaction to himself, suitable benefit to the object in view, and advantage to the community. The way, then, in which I would meet the difficulty would be thus: first, I would have every physician and surgeon allowed a small stipend, so as not to trespass much upon the funds of the institution, for it is the principle I contend for, not the extent of remuneration; secondly, I would not allow any medical or surgical officer to be appointed unless he would agree to become a clinical teacher, by lectures and actual observations, if not something more, and that each pupil should contribute small fees for such instruction; thirdly, I would limit the services of every officer to ten or fifteen years, and imitate the example set by such men as the late Dr. Baillie and Sir Benjamin Brodie, both of St. George's Hospital, in London. By this plan, the early labors of the medical officer would be forced into action and energetic exertion, and the small remuneration would make him less anxious for private emolument; it would secure able physicians and skilful surgeons for the public, when fitted to be candidates for public confidence and private profit, and make them cheerfully resign their public situations, to be filled by juniors to tread in their steps.

If some such modification as the above is not speedily adopted, the time is not far distant when the evil will cure itself; for, so late as last week, only one physician offered himself for a vacancy in one of our dispensaries, although there are many anxiously looking forward to speedy employment. And this cannot be thought surprising, when not less than 80,000 patients are attended or prescribed for in the charities of Liverpool every year.

I am, Gentlemen,
Yours faithfully,
THOMAS JEFFREYS.

Liverpool, July 19, 1842.

BARON LARREY.

We regret to announce the death of the veteran Baron Larrey, the Nestor of French military surgery. He expired on Monday, the 25th ult, at Lyons, in the arms of his son, who had accompanied him on his recent visit to Africa, to inspect the troops there, whence he had just returned. His professional life commenced in 1787, when he embarked for America as surgeon-major in the royal navy. He was afterwards attached to Napoleon's army, where he was highly esteemed. By that great general, whom he followed in all his campaigns, he was spoken of as a "most honest man." The Baron's skill as a practical surgeon is attested by his great work on military surgery, which contains the results of his long experience gained by constant practice in the most sanguinary wars that have ever devastated Europe. It is remarkably free from national prejudice, and abounds with interesting facts and useful observations. It, in addition, recommends itself to the general reader and historian as well as to the medical man, inasmuch as it contains an excellent sketch of his great master's victories and campaigns, graphically and philosophically drawn, and also furnishes information with respect to the internal arrangements of the army, for which the world was not prepared. It will scarcely be believed, that when Napoleon assembled that immense army of 400,000 men, for the subjugation of the Russian empire, little or no preparation was made for the relief of the wounded. Yet such was the fact. Larrey says, when describing the battle of Smolensko, "Here, as at Witepsk, we were in want of all sorts of things necessary for dressing the wounded. For lint we were obliged to substitute paper, and the parchment archives of the city were converted into splints." An excellent occasion certainly to bring forth the talent and ready zeal of the head of the surgical department, but one that will in no way increase the lustre of Napoleon's name. He evidently thought only of victory and was unprepared for defeat, and even for the inevitable consequences of success.

Larrey was with the troops throughout their advance, and accompanied them also in their disastrous retreat. He attributed his preservation during the return to his habit of marching on foot. He walked almost the whole way, and never approached a fire. Those who did not observe this precaution were so benumbed by the cold, that when the bivouac fires were lighted, they did not feel the heat till the seeds of gangrene were sown. The intense cold was their principal enemy.

At the fatal passage of the Beresina, Larrey nearly lost his life, owing to his anxiety to preserve his surgical instruments, but the attachment of the soldiers saved him, for he was no sooner recognised in the crowd, than he was raised over the heads of the troops, and passed forward from man to man until he reached the bridge, then blocked-up with military materials and the bodies of the dead and dying.

Larrey, on his return, continued employed in a military capacity; and, at the time of his death, he held the rank of Inspecteur du Conseil de Santé des Armées. He has enriched medical science with many valuable observations, drawn from the experience of a long and active life—PEACE BE TO HIS MANES.

The chair of clinical surgery at the Faculty of Medicine at Paris has been filled by M. Bérard. The candidates were Bérard, Vidal, Laugier, Robert, Chrestien, Huguier, Thierry, Malgaigne, Boyer, and Chassaignac.

THE QUARTERLY TABLES OF MORTALITY.

It appears, from the official quarterly table of mortality in 114 of the principal districts (including nearly all the large towns of England and Wales), that the total number of deaths in the quarter ending March 31, 1842, was 44,479. The number of deaths in the metropolis during the same period was 12,396.

OBITUARY.

On Saturday, the 30th of July, aged sixty-eight, Mr. Gillham, the resident medical officer of the National Vaccine Institution.

At St. Lucia, by drowning, Dr. Mackintosh, assistant-surgeon of the 33rd regiment; and Mr. Greer, staff assistant-surgeon.

In the Bay of Bengal, on board the Carnatic, Henry Travers Eales, assistant-surgeon, Bengal establishment.

VACANCIES.

The office of assistant-surgeon to the Lock Hospital is vacant by the death of Mr. H. Good. The candidates are Mr. Acton, Mr. H. Lee, Mr. Lane, and Mr. S. Stranger.

The office of resident medical superintendent to the National Vaccine Institution, near Fitzroy-square, is vacated by the death of Mr. Gillham, who expired on Saturday morning last. The candidates are Mr. Carpue, who has long been one of the vaccinators to the institution, Mr. Hellyer, and Mr. Simpson. The annual value of the appointment is £200, besides the use of a large and handsome house, rent and taxes free, coals and candles. It is in the gift of the respective Presidents of the Royal Colleges of Physicians and of Surgeons in London, and of Dr. Holland.

PROMOTIONS AND APPOINTMENTS.

MILITARY.

9th Regiment of Foot—Staff-surgeon of the second class, James Malcolm, to be surgeon, vice Sievwright, promoted on the staff.

32nd Foot—Edward Moorhead, M.D., to be assistant-surgeon, vice M'Gregor, appointed to the staff.

33rd Foot—Assistant-surgeon John George Bowlby, from the 1st West India regiment, to be assistant-surgeon, vice Mackintosh, deceased.

71st Foot—Assistant-surgeon George Carr, from the staff, to be assistant-surgeon, vice M'Diarmid, who exchanges.

1st West India Regiment—Frank Andrews, gent., to be assistant-surgeon, vice Bowlby, appointed to the 33rd foot.

Hospital Staff—Surgeon James French, M.D., from the 49th foot, to be staff-surgeon of the first class; Surgeon Francis Sievwright, M.D., from the 9th foot, to be staff-surgeon of the first class, vice John Lightbody, who retires upon half-pay; Staff Assistant-surgeon Samuel Maitland Hadaway, to be staff-surgeon of the second class, vice Malcolm, appointed to the 9th foot; Francis Reid, M.D., to be assistant-surgeon to the forces, vice Hadaway; Assistant-surgeon John Duncan M'Diarmid, from the 71st foot, to be assistant-surgeon to the forces, vice Carr, who exchanges; Assistant-surgeon Duncan M'Gregor, from the 32nd foot, to be assistant-surgeon to the forces, vice Greer, deceased.

NAVAL.

Assistant-surgeon Ebenezer Robertson, late of the Benbow, to the rank of surgeon; Assistant-surgeon J. N. Derriman, to the Sea-flower; N. B. Alexander, to the Caledonia; J. Little, to the Phœnix, vice Mould, to the Inconstant; J. Findlay, to the Griffon.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, July 29, 1842.

Thomas Boycott, Benjamin Clarke, Henry Bentall Evans, Henry Pittener Freeman, William Folwill, Robert George, Alfred Lacey, Hugh Martin Macpherson, Frederick John Robinson.

Monday, August 1, 1842.

William Thomas Billings, Edward Griffith, Charles Hewitt Moore, John Morley, Edward Miller, John Archibald Jones Martin, Henry Edmonds Norris, Henry Neville, William Henry Pettigrew, William Nash Spong.

APOTHECARIES' HALL.

Licentiates admitted Thursday, July 28, 1842.

R. Stewart, London; J. H. Gray, Manchester; John Gregory, Sunderland; N. J. Watson, Burnopfield; G. J. Seale, Portsmouth; J. Prins, Wiveliscombe; H. B. Curtis, Paulton, Somerset.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, *Strand, London.*

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TO CORRESPONDENTS.

Communications have been received from *Dr. Cowan, Mr. Smith, Dr. Thomson, Chirurgus, Dr. Hall,* &c.

The Retrospective Address of the Reading Pathological Society has been received.

The communications of *Mr. Valentine, Mr. Nottingham,* &c., are unavoidably deferred.

A General Practitioner is informed that no law has been passed respecting empiricism during the present session.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
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RETROSPECTIVE ADDRESS
OF THE
FIRST ANNIVERSARY
OF THE
READING PATHOLOGICAL SOCIETY.

By Charles Cowan, M.D.,
Physician to the Royal Berkshire Hospital and Reading Dispensary.

[Read August 2, 1842.]

Mr. President and Gentlemen,—If there be one feature more characteristic than another of the present aspect of the medical profession, it is that of combination.

Societies and associations have multiplied and extended beyond all former precedent, the principle and advantages of union being more generally and simultaneously acknowledged, while the effect has evidently been to increase our power and our usefulness, to elicit our kindlier and better feelings, to cultivate and warm our social faculties, to break in upon the cheerlessness of isolated, unsympathising effort, to inspire us with a greater love for our interesting though arduous calling, and to excite a higher ambition to maintain its dignity and contribute to its advancement.

Nor is this all: we have approximated individually as well as collectively; we have become better acquainted with each other; and, from closer contact, have resulted increased pleasure and regard. It may be safely asserted that he who associates most with his professional brethren, most learns to value and respect them. His petty selfish jealousies yield to the more genial influence of generous sentiments; and we need only look around for proofs, that men may run the race of active, honorable competition, and preserve inviolate the bonds of good fellowship and peace.

Our little society, of which we now celebrate the first anniversary, we are gratified in saying, may be regarded as an example of the principle and effects we have just alluded to; and, in proportion as the same spirit is infused into our future efforts, may we anticipate a full and abundant reward.

The Reading Pathological Society was established on the 13th of June, 1841, and its origin may be fairly attributed to the erection of the Royal Berkshire Hospital, which thus became the means of realising the intentions and wishes of those who had long contemplated such an association. We are much indebted to the board of management for the convenient and advantageous locality in which we meet, and for the comforts and facilities they have so liberally supplied; and we have also the satisfaction of feeling we are somewhat responding to these favors by contributing to the formation of a museum, which we trust shall, at no distant period, be a credit to its collectors, and worthy of so noble an institution.

Our objects are simple and purely practical—viz., the discussion of medical and surgical subjects, with the view of eliciting mutual experience, and to catch, as it were, and diffuse the daily record of practice, which would otherwise be circumscribed or forgotten.

The advantages of such an association, in addition to those we have already insisted upon, are obvious. We hold out distinct encouragement to professional diligence and zeal; we give a motive for accuracy of observation on the living, and for inspecting appearances after death; we excite fresh interest in our daily bed-side duties, and are enabled to make inquiries and discuss difficulties, when their solution is important, and their memory unfaded. Our rules are few, our efforts voluntary; and, though numerous questions have been brought forward and discussed, I believe good feeling and good faith have universally prevailed.

During the past year thirteen meetings of the society have taken place, and of these, in compliance with the wishes of the members, we now proceed to give a brief retrospective history. To render the necessary detail as useful and interesting as possible, some arrangement of the materials was absolutely necessary, and the plan we have adopted is, first, to give a short outline of the principal communications, oral or written, nearly in the order of their presentation, and afterwards a classified enumeration of the morbid specimens, appending occasionally a brief history of the case, or any observations which may have transpired calculated to add to their interest or usefulness.

The object of your reporter has been to act as the historian, and not as the annotator of the society; and he has, therefore, abstained from any other sources of information than the written or remembered record of your proceedings.

In concluding these introductory remarks, it is now our pleasing duty to express our obligations, and those of the members generally, to your intelligent and indefatigable secretary, Dr. Woodhouse, without the assistance of whose accurate and lucid minutes the present undertaking must have proved abortive. We are also much indebted to Mr. Dunn, who has kindly consented to act as our curator, for the admirable manner in which the morbid specimens have been prepared for the museum.

COMMUNICATIONS.

The first paper we have to notice was by Mr. F. Bulley, on a case of aneurism. The writer's object was to explain his reasons for not deeming it prudent to operate upon a patient admitted into the hospital, laboring under aneurism of the arteria innominata.

As a modification and extension of the plans of Brasdor and Wardrop, the tying of the carotid and subclavian arteries had been suggested by his colleagues. The patient was afterwards admitted into

King's College Hospital, and the carotid successfully tied by Professor Fergusson, with partial diminution of the swelling and pulsation; but death took place twelve days subsequently, from an attack of acute bronchitis, preventing any satisfactory conclusion as to the propriety of the operation or otherwise. It was the intention of Professor F. to have tied the subclavian had the patient survived, and the first operation proved insufficient. The practice of Valsalva had been put in force for ten days in the Royal Berkshire Hospital by Mr. Bulley, with decided benefit, the pulsations diminishing, and the solidity of the tumor increasing, but the patient wishing the operation to be performed, was in consequence discharged.

The following is a summary of Mr. Bulley's objections:—

1. The extent and locality of the tumor rendered a ligature on the cardiac side impossible.

2. A ligature on the distal side was only prudent when no branches intervened between the ligature and the sac.

3. That a distal ligature, in recent cases of aneurism, endangered bursting the sac, as happened to Deschamps and Sir A. Cooper, and that its natural effect is to produce inflammation.

4. That it is only in cases where the tumor is out of the direct current, and when no vessel was given off between the ligature and the sac, that the distal ligature promised benefit.

5. That the cases of cure reported by Messrs. Wardrop, Mott, Fearns, and Wycomb, are more probably to be ascribed to natural processes than to the effects of the operation.

6. That, in the case of his own patient, all the unfavorable conditions were present, with probable disease of the arteries beyond the sac, and a state of general health unfavorable for so serious an operation.

7. The improvement resulting from palliative treatment, Mr. B. also considered an additional reason for the line of practice he had adopted. Mr. B. summed up his objections by stating that he considered the operation as a very dangerous procedure, and only to be resorted to in cases of extreme necessity, and where the palliative mode of treatment had failed.

A protracted and very interesting discussion took place at the same and following meeting, in which Mr. May maintained that spontaneous cure of aneurism of the innominata never took place. He supported the propriety of operating in such circumstances, and as early as possible. He gave a tabular analysis of the ten recorded cases where a single distal ligature was applied, two of which were successful and now living, and, from these data, concluded that surgical interference was both justifiable and necessary, and expressed his conviction that *both* the carotid and subclavian should be tied, either at one or different periods, as the circumstances of the patient might indicate.

The question is, no doubt, one fairly open to discussion, the evidence yet accumulated being insufficient for any absolute decision; we shall not, therefore, attempt to pass any verdict upon the respective merits of the preceding opinions.

Mr. Harrinson, at the close of the debate, made some practical observations on the importance of depletion, after severe operations on the larger vessels, for the purpose of preventing secondary visceral disease.

On September the 7th a paper on Medical Statistics was read by your reporter. It was illustrative of the plan of registration, as detailed in the "Provincial Transactions," and as adopted in the hospital and dispensary of this town.

It contained a general and special analysis of 1,349 cases, and was intended to point out how much valuable information would be secured were such a mode of reporting generally adopted. Having been published in the "Lancet" for June 11, 18, and 26, any further analysis is at present unnecessary.

Mr. Walker read the case of a girl who suffered from severe ptyalism when attending upon her mother, under mercurial treatment for pneumonia, in a very small and badly-ventilated room.

Every precaution was taken to test the reality of the fact, and a confirmative instance was at a subsequent meeting read by Mr. Boulger, occurring in his own practice. The statements of other members tended to establish the possibility of such an occurrence, though arriving at the literal truth must always be considered as extremely difficult. Many cases are on record of salivation from very minute doses of mercury, and the volatile power of this mineral is well known. It is certainly possible that minute quantities may be inhaled from the skin and lungs of a mercurialised patient, but a peculiar idiosyncracy in persons so affected, must be admitted.

Some interesting observations on the state of the blood after operations, and in asthenic cases generally, were read by Mr. Bulley, tending to prove that there was a deficiency of *iron* in the circulating fluid, that element being eliminated by the kidneys; and he inferred, theoretically and from experience, that the use of steel, under such circumstances, was decidedly beneficial. Mr. B. promised to give his facts and inferences in greater detail at some future meeting. Humoral pathology has again revived amongst us, and, with the assistance of modern science, much practical good has already resulted, and much more may be anticipated from continued investigations.

Mr. Harrinson read a paper on Diseases of the Ear, October 5. The writer's object was to show the importance of diseases of this organ, about the nature and treatment of which so little was known by the great mass of the profession. "There appears," he says, "to be among surgeons a singular dread and inward horror against ever looking into the ear—a disposition to seek anywhere for the cause of deafness rather than in that situation, to which we might suppose common sense would instinctively direct us—viz., the ear itself." He drew an ingenious comparison between the eye and the ear, as to their uses, structure, connections, and sympathies, and then dwelt on the frequency, interest, diagnostic characters, and danger of aural disease. A brief but classified description was then given of some of the more prominent morbid liabilities of the auditory apparatus, and a variety of cases were subjoined to prove the triumph of art when under the guidance of enlightened science, and the amount of suffering unrelieved, and mischief induced, from the want of knowledge possessed by a few, but attainable by all. A discussion followed, which had chiefly reference to the therapeu-

tical value of the modes of treatment recently recommended.

On the same evening an interesting case of sudden death, occurring during labour, was read by Mr. Taylor, jun., of Wargrave. The patient, whose symptoms were minutely detailed, died almost instantly after a severe uterine pain. No other morbid changes were discovered after death than a small quantity of air in the heart, and a considerable effusion of blood in the theca vertebralis. The latter was, no doubt, the immediate cause of death; but it does not satisfactorily account for the extreme suddenness of dissolution, which, perhaps, must be partially attributed, in the present instance, to the associated conditions of great nervous exhaustion from mental agitation and pain, involving what is familiarly expressed by the term *shock* of the nervous system.

In the debate which followed, the question was discussed whether effusion of blood *above* the phrenic nerves did or did not cause instant death. Cases were related by different members from Müller and Abercombie, tending to prove that the lesion was not necessarily or immediately fatal. Mr. May strongly insisted upon the importance of distinguishing between hæmorrhage without and within the theca, that on the exterior being much more likely to produce fatal pressure, from the circumscribed situation in which it occurs; and he attributed the apparent contradictions in the results, as narrated by different writers, to want of attention to this fact. He mentioned the case of a man suffering from caries of the second cervical vertebra, who died suddenly the day after admission into the hospital, and where a limited effusion of blood, above the phrenic nerves and outside the theca, was the only lesion discovered.

Mr. Harrinson reported the case of a groom who fell from a horse, and was taken up labouring under the symptoms of concussion of the brain. The next morning he was better, but the day after, a state of collapse succeeded, and he died in forty-five hours from the time of the accident, without paralysis of any kind. The fourth cervical vertebra was fractured, with considerable effusion of blood into the spinal canal.

Spinal hæmorrhage, as one of the causes of sudden death, has not, perhaps, attracted sufficient attention, and, no doubt, when present, has been often overlooked in post-mortem investigations.

The case narrated by Mr. Taylor also led to the consideration of the necessary steps to be taken for saving the child under similar circumstances, and it was concluded, in the event of not being able to effect rapid delivery, that so soon as we were satisfied of the mother's death, and had explained the circumstances to the friends, the Cæsarean section should be made, and that even the lapse of an hour should not prevent our removing and attempting to recover the child.

Mr. May related a fatal case of ileus depending on a rare form of obstruction. The mesentery was throughout thickened and contracted, inducing a puckered condition of the mucous and submucous coats, which, in the obstructed portion, hung in folds across the canal, and seemed the cause of the attack. There were other indications of chronic peritoneal disease. Mr. M. had met with one similar case.

Mr. Sylvester, on the 7th of December, read a paper on the Pathology of Hooping-cough, concluding, after having canvassed the numerous opinions of different writers upon the subject, that it might be considered an "infectious bronchitis," to which pneumonia succeeded in some cases, in others mischief in the brain.

A long discussion succeeded, in which various opinions were expressed, the majority of the members considering the complaint to come under the head of infectious diseases generally, the specific poison in pertussis affecting primarily the nervous system, and in particular the respiratory nerves, and generally leading to more or less secondary vascular pulmonic disturbance.

Mr. Harrinson advanced and ingeniously supported the novel hypothesis that the pathology of hooping-cough was inflammation of the middle lobe of the lung, with irritation of the posterior pulmonic plexus.

At the next meeting Mr. Vines read a communication on the treatment of pertussis. After adverting to the numberless panaceas proposed for its cure, and to the theories as to its pathology, discussed the preceding evening, Mr. V. remarked that light is often thrown on the pathology of a complaint by observing the action of the remedies employed, and that we should be guided in our treatment by the symptoms rather than the name of the disease. He then considered *seriatim* the different classes of remedial means, advising laxatives, with occasional emetics, in the early stage. If any inflammatory action was present, the application of leeches, followed by poultices, were the best, with calomel and Dover's powder. Ipecacuanha was useful in all stages; and when the expectoration was copious, he had found the compound tincture of camphor and nitric æther very useful; of the liquor potassæ he thought highly, the secretions from the lining membrane being remarkably acid—a fact which forms a strong indication for the use of alkalescent medicines. Sedatives are very generally applicable; and, when flatulence prevails, Hoffman's anodyne is useful. Mild counter irritation to the chest was also recommended. He lastly directed attention to the cases reported by Dr. Dohnn, of Holstein, where rapid benefit seemed to result from inhalations with benzoin, styrax, rose, and lavender flowers. Tonics, and, above all, change of air, are necessary for obstinate cases.

In the conversation which followed, Mr. Walfourd stated that he had seen much relief from leeches to the larynx, with laxatives and alkalies. The combination of acetate of lead with the extract of conium was also stated to have been unusually successful in the hands of an extensive general practitioner.

Mr. Harrinson read a very interesting and distressing case of utero-vesical fistula, of five years' duration, where he succeeded, after much difficulty, in discovering the opening, and passing six strong silk threads from the bladder into the uterus by means of a curved catheter. He then withdrew one thread every three or four days, and, on the seventeenth day, only one remained. No dribbling took place from the first, except during violent straining; before it was constant. The removal of the last thread was followed, after a short time, by a return of the symptoms, and the same treatment was repeated. The

patient continues to wear one thread, and, when not much exerting herself, is free from all inconvenience, and, from a state of extreme suffering and misery, is restored to one of health and comfort. Mr. H. anticipates a complete cure, and deserves much credit for the ingenuity and perseverance displayed in the treatment. The hint is valuable, and admits of other applications.

Mr. Walfourd related a case of phthisis in a girl aged sixteen, where considerable opacity of the membranes of the brain, with serous effusion in the ventricles and round the base, were found after death, no symptoms having led him to suspect their existence.

Mr. Sylvester gave a brief sketch of four cases of injury to the elbow-joint, occurring in children generally under four years of age, of relaxed and strumous habits, resulting, he thought, from partial dislocation of the radius, and caused by lifting the child by the wrists, or catching it by the arms when falling. The displacement was easily reduced, and as easily recurred.

On April 5, your reporter related the experiments of Mr. Braid, of Manchester, which he had witnessed in London, on the production of nervous sleep and cataleptic phenomena. Our object was to prove that the effects attributed to animal magnetism admitted of a far more simple and rational explanation than what is assumed by the teachers and disciples of that pseudo-science, and also to point out how the peculiar nervous susceptibilities of particular individuals might be usefully taken advantage of in the treatment of disease. On no subject has greater extravagance been committed than on the one now referred to, and no instances can be cited where men of talent and information have become the victims of an equal amount of absurdity and delusion.

On the 3rd of May some observations were read by Mr. Bulley "On the Relative Advantages of Immediate and Deferred Amputation in Cases of Severe Compound Fracture." He advocated the principle of waiting a longer or shorter time, in the generality of such cases, before proceeding to so severe an operation; founding his opinion on the danger arising from immediately superadding the shock of operation to that of the accident, and stating that he believed the danger to be less from two shocks, with sufficient interval between them, than that arising from the effect of operating before the first impression on the nervous system had subsided. By too great promptness we often failed to ascertain the real extent of the local mischief, and that some hours must elapse before we can fully detect the amount of injury which the muscles have received. When, however, much suffering resulted from the laceration of a nerve, or when an artery was opened, and could not be secured, no doubt could exist as to the propriety of immediate amputation.

Mr. B. then combated the objection of gangrene, by urging that it seldom occurred before the second or third day, and that, in traumatic cases, amputation may be safely resorted to when the line of demarcation was not very apparent, provided we were guided by the state of the *muscles*, and not of the *skin*, the latter often appearing sound, while the former were disorganised. He also argued that, by prudent delay, the system is enabled to accommodate itself gradually to the locally interrupted circulation, and that the after evils of suddenly induced plethora, are partially obviated by the effusion which soon takes place in the injured textures.

Perhaps the above, like many other contested questions, must, after all, be left to the practitioner's sagacity and skill, and cannot be subjected to any general rule. Much evil has, no doubt, arisen from hasty routine operations; and, on the other hand, mischief has often resulted from undue procrastination. The path of safety is, doubtless, that which leads us to the careful weighing of all the circumstances attending each individual case, rather than in subjecting our practice to the dicta of general but often inapplicable rules.

The last paper of the season was read by Mr. Sylvester, June 5, on Latent Pneumonia, the object of which was to direct attention to the very insidious way in which pulmonary inflammation might supervene without the ordinary symptomatic indications. These views were illustrated by the history of two cases recently occurring in his own practice. A discussion followed.

The general practical soundness of Mr. Sylvester's statements were admitted, but the term "latent" was considered as almost inapplicable to diseases of the chest, and also to many other affections to which it had been formerly applied.

Where our present means of physical diagnosis were carefully employed, and *all* the functions of the patient accurately questioned, there would be comparatively few cases where the term "latent" was strictly correct. If intended to express the mere absence of prominent and characteristic functional disturbance, the most acute as well as chronic diseases would occasionally be included. The fact is, that the vividness of nosological description is seldom realised at the bed-side, and too much is expected from the mere observation of symptoms, forgetful of the many influences which interfere with their more than partial, or excite their exaggerated, development, and practically unmindful of their frequent disproportion to the extent of local disease. It is here that pathology comes to our aid, acquainting us with what we may term the natural history of disease, and leading us to search for and anticipate changes which no other method of investigation could ever have enabled us to discover, and often not even to suspect.

Having now completed our intention (feebly and imperfectly, we confess) of giving a brief outline of the principal communications read or narrated during the past year, we shall, without further comment, proceed to report upon the morbid specimens, in accordance with the plan we have already laid down. And, first, as to diseases of the

Osseous System.

1. By Mr. Maurice.—The first we have to notice was—fracture and depression of the sixth cervical vertebra, proving fatal in sixty-nine hours. Respiration was wholly effected by the diaphragm, until a few hours before death, when the muscles supplied by the spinal accessories assisted. The process of breathing was to the eye reversed, the thorax collapsing and abdomen expanding during inspiration, and the reverse during expiration. The patient was not conscious of dyspnœa. Sensibility and motion

were extinct below the neck, and no reflex movements could be excited.

2. Mr. Bulley.—Fracture of the first lumbar vertebra, with compression of the medulla, and partial laceration of the posterior column.

Sensation was partially retained, and slight movements could be excited in the left thigh by tickling the soles of the feet. The patient survived nine days.

3. Mr. May.—Example of complete section of the spinal cord. The divided surfaces were not softened or otherwise modified. Effect of fracture of second dorsal vertebra from fall, in a man aged thirty. Death forty-one days after the accident. Loss of motion and sensation below third dorsal.

4. Mr. Walker.—Upper portion of a femur dug up in Sonning churchyard, presenting several processes and projections of unusual size, evidently thrown up to support the head, which, with the neck, presented the irregular flattened appearance described by Sir Astley Cooper, and Mr. Adams of Dublin, as resulting from chronic rheumatic inflammation.

5. Mr. Harrinson.—Fracture of the neck of the femur in a man aged eighty-two, with no attempt at union. The limb was only slightly shortened during life.

6. Mr. Bulley.—Fracture of the neck of the femur and of the trochanter major, where the neck was shortened by being impacted in the cancellous structure of the split trochanter. A description of the case was given, and has since been published in, the "Provincial Journal."

7. Mr. Walker.—Tibia dug up in Kent after 500 years' interment, and presenting the traces of a well-united fracture: very creditable to the skill of our brethren in olden times.

8. Mr. Walker—Scrofulous ulceration of the tibia, removed by amputation from a child, by Mr. Brooks, of Henley. The caries, contrary to the usual course, was limited to the shaft instead of the cancellated portions of the bone.

9. Mr. Bulley.—Ulcerated cartilages of the knee-joint, from a patient whose leg was amputated in consequence of uncontrollable hæmorrhage occurring in an extensive abscess, which communicated with the articulation.

10. Mr. Walker.—Spicula of bone from the head of a lady who died epileptic. Convulsions came on for the first time thirty-six hours before death. The scalp was bloodless, the brain much congested.

11. Mr. Bulley.—Cast of a scrofulous enlargement of the knee.

12. Mr. Bulley.—Cast of a hand contracted by a burn seventy years ago.

Diseases of the Heart and Large Vessels.

13. Dr. Woodhouse.—Diseased mitral and aortic valves, from a man aged fifty-one. On the upper surface of the large flap of the bicuspid there was a pouch large enough to admit the end of the finger from beneath. It seemed produced by former rupture of the valve, and subsequent distension from below of the effused lymph. There were several warty growths on the aortic valves, and one very large one on the portion nearest to the septum. The bellows murmur was remarkably loud, diffused, and superficial, masking the second sound, and conveying the impression of pericarditic disease. The patient had suffered from repeated attacks of syphilis.

14. Dr. Woodhouse.—Ossified aortic valves from a man who died anasarcous in the hospital, and in whom gangrene followed acupuncture on the dorsum of the foot, though the sloughing did not commence round the punctured spots. A discussion took place on the uses and effects of acupuncture in cases of œdematous limbs. Successful instances of puncture below the knee were related, but the members generally coincided in the prudence of puncturing above the knee in all cases, which, with elevation of the limbs, was generally sufficient to drain off the serum.

A case of diseased heart and liver, with distressing anasarca, was also referred to by the writer, where rapid gangrene and death followed the application of two small blisters above the knee. The patient, though greatly relieved at first, quickly sunk under the secondary effects.

Perhaps attention to the general state and vital power of the patient is of more practical importance than the point selected for operation. Puncture of the skin is, probably, safe everywhere in some instances, and nowhere in others.

Mr. Jeston, of Henley, in allusion to the same subject, stated that he had seen much benefit result, in several instances of anasarcous limbs, from frictions, with the infusion of digitalis and the strong ammoniacal solution. This application had brought on copious diuresis where all other means had failed. He proposed stating his experience at greater length on some future occasion.

15. Dr. Woodhouse.—Aneurism of the aorta, involving the subclavians. The patient, a man, had been habitually intemperate.

16. Mr. Dunn, for Mr. Weight, of Wokingham.—Dilatation of the left auricle—almost complete closure of the auriculo-ventricular orifice—atrophy of the left ventricle, and hypertrophy of the right. No history.

17. Mr. Vines.—Dilatation of the aortic arch—contraction of the aortic orifice—left ventricle contracted.

18. Mr. May.—Universally adherent pericardium—aortic valves indurated and patulous—aorta dilated and diseased. The arrangement of the deposit on the valves confirmed the accuracy of Dr. Watson's views, as recently published.

Diseases of the Lungs.

19. Dr. Cowan.—Acephalocysts of the lungs. They were coughed up by a shoemaker, aged twenty-two. The principal cyst was as large as an egg, and there were five or six smaller ones, all torn and empty. Their expulsion followed a violent fit of coughing, and some muco-purulent offensive fluid was expectorated for some hours subsequently. In two days all pulmonary irritation had ceased. A smaller quantity had been ejected twelve months previously, and also six weeks before the last attack. The patient was of small stature, pale, and strumous in appearance, but otherwise enjoying good health. He had had no return six months afterwards. The stethoscope and percussion detected nothing but some mucous ronchus in the inferior and anterior portions of the right lung. There was no evidence of hepatic disease.

Very few cases of pulmonary hydatids are on record.

Mr. May mentioned that, some years ago, a patient under his care had expectorated a large number of

flattened membranes, resembling the skins of white grapes. The patient is still living.

Malignant Diseases.

20. Mr. Harrinson.—Scirrhous thickening, but no obstruction or ulceration of the pylorus; stomach greatly enlarged, but not otherwise morbid; the duodenum was also remarkably dilated, almost like a second stomach. The condition of the stomach was, probably, the consequence of pyloric obstruction, though the opening was found free after death. In the earlier stages of disease the local sensibility is necessarily heightened, and presents a formidable functional obstacle to the egress of food, while later changes establish a permanent patency in an orifice which at first was narrowed. The painful, irritable condition of the pylorus might also interfere with the peristaltic movements of the duodenum, and thus lead to its gradual distension and enlargement.

21. Dr. Woodhouse.—Scirrhous pylorus, with a very small opening into the duodenum; stomach healthy; the left hepatic lobe was nearly replaced by a large carcinomatous tumor.

22. Dr. Woodhouse.—Scirrhous pylorus. No history.

23. Mr. May.—Scirrhous œsophagus, with perforation of the left bronchus, and also of the arch of the aorta. The patient died from sudden hæmorrhage.

Other cases of malignant disease were related by different members. One occurred in a gentleman who was obliged to swallow quicksilver in large quantities before he was able to take the smallest quantity of fluid food. The practice was recommended by Sir Astley Cooper, and did not apparently injure the general health.

24. Mr. May.—Encephaloid carcinomatous tumor of the orbit, with a cast, taken after death. The patient was a bricklayer, aged twenty-one. A small encephaloid carcinoma of the eyelid, commencing in the conjunctiva at the angle of reflection, was removed by operation. It soon returned, and rapidly progressed. Death took place from exhaustion in nine months from the commencement.

The tumor was about the size of a full grown fœtus's head, globular in shape, cerebriform in consistence, of a greyish white colour, sloughing surface, and central vascularity. The globe was atrophied, the orbital contents of medullary appearance, and creamy consistence near the bones; optic nerve healthy, and abruptly lost in this structure; bones of orbit partially absorbed; brain healthy; no glandular enlargement; hereditary predisposition presumptive, his father, grandmother, and great grandmother having had malignant disease. The case may be regarded as rare and interesting.

A duplicate cast, together with a history of the case, has been forwarded by Mr. May to the museum of the Royal College of Surgeons, London.

Malformations.

25. Mr. Harrinson presented the drawing of an infant with double hare-lip. The nose, mouth, and pharynx formed one cavity, the opening of the palate occurring on either side of the intermaxillary bone, which remained in its fœtal distinctness and isolation, from arrest of lateral development.

26. Mr. Harrinson.—A full grown and otherwise well formed anencephalous fœtus. It lived nine days, performing all the animal functions with regularity, and died convulsive. There was only one eye, and that near the centre of the forehead. Within the flattened cranium there was a cavity about the size of a walnut, but the nervous structure was too diffluent from decomposition to admit of useful examination.

Mr. Harrinson.—Occipital tumor, removed from a child during life, and found to communicate by a small tubular orifice with the cavity of the skull. The practitioner should be aware of the frequency of this fact in tumors of the scalp in children, and proceed with caution. It is probable that, by the process of growth, all internal communication would cease.

Mr. Harrinson.—Specimen of extrophy of the bladder, in a female child six days old. Death resulted from general inflammation of the cellular tissue and abscess in the left breast. The various opinions and theories on this singular malformation were fully stated by Mr. H.

Mr. Harrinson.—Imperforate anus, where the operation was performed by a sharp curved trochar, which succeeded in reaching the cavity of the bowel and discharging its contents. A second obstruction existed higher up, and the child died three days afterwards. Mr. H. thought the bistoury preferable to the trochar.

Mr. Harrinson.—Dried preparation where the urethra, vagina, and rectum, terminated in a common cloacum.

Mr. May.—Pigeon-breasted thorax of an infant twelve months old, illustrative of the views of Mr. Shaw, as detailed in the "Medical Gazette" for October 29, 1841, where that gentleman clearly demonstrates its dependance on atmospheric pressure, the consequence of deficient expansibility of some portions of the lung, either from the persistence of fœtal, or the after occurrence of inflammatory conditions. The subject is a very interesting one, and strictly in accordance with the general law of the dependance of the containing upon the contained. The principle so ingeniously established by Mr. Shaw has been partially recognised as explanatory of changes in the form of the thorax, after certain inflammatory affections of the pleura or lungs, but was never successfully applied to the explanation of infant thoracic deformity, prior to the researches in question.

Morbid Fœtal Conditions.

27. Mr. Harrinson.—Diseased placenta, with the fœtus of five months' growth, but not expelled till the seventh month.

28. Mr. Harrinson.—Fœtus six weeks old. Perfect.

29. Mr. May.—Portion of a fœtal parietal bone passed per anum, by a woman who, twenty years since, voided several other bones in the same way. She had been pregnant seven months when the first was discharged.

30. Mr. Harrinson.—Double-knotted umbilical cord. The entire cord was forty-four inches long, belonging to an unusually large and healthy child, weighing thirteen pounds. A long cord and a large quantity of liquor amnii were considered the necessary and predisposing conditions.

Mr. Jeston, of Henley, said he had met with one instance of double and three of single knots. In one case the fœtus died suddenly.

Mr. Bulley, senior, during a very long and extensive practice, had never met a case of double knots, and only recollected one example of a single one. They are sometimes drawn so tight as to occasion death or arrest development; and these varieties in the results are, probably, mainly dependant on the period of their formation. The present specimen is extremely rare.

Tumors.

31. Mr. Bulley.—Osseo-fibrous tumors of the uterus. This remarkable specimen was removed from a maiden lady, aged sixty-seven. The entire mass weighed three pounds and a half avoirdupois. The largest tumor communicated with the uterus only by a thin pedicle of serous membrane which was reflected over the entire mass. It was almost wholly osseous, requiring to be sawn through, and about as large as the hands closed and arched. Osseous nodules and irregular bony deposits occupied the centre of the smaller tumors, which were principally fibrous, about a dozen in number, and varying in size from a pea to an orange. The smallest were embedded in the muscular fibres, which were reflected over the more projecting ones, the largest being alone covered by the serous membrane. The tubes and ovaries were normal.

The bony mass already described lay in the right lumbar region, and by obstructing the bowels in consequence of accidental displacement, was the immediate cause of death. A variety of anomalous head and abdominal symptoms had been present for years, baffling both the diagnosis and treatment. From the great corpulency of the patient, the presence of tumor could not be ascertained until about three months before her death; and in consequence of its ascending above the false ribs, and terminating abruptly towards the pelvis, its connection with the uterine organs was not suspected. The catamenia had continued till the fifty-second year; they were at times profuse, and uterine irritation and distress had been occasionally present.

Analogous cases may be found in the works of Davis, Dupuytren, Churchill, and others; but the size of the present tumor, and its complete osseous transformation, render it both rare and interesting.

The case has been fully detailed by Mr. Bulley in the "Provincial Journal."

32. Mr. May.—Osseo-fibrous tumor of the uterus, showing the different stages of transformation. Andral states that one in five of old females have fibrous tumors in the uterus.

33. Mr. Weight, of Wokingham.—Two large cellulo-fibrous tumors of the ovaries, weighing fourteen pounds, and removed from a maiden lady, aged seventy. They were correctly diagnosed during life.

34. Mr. Vines.—A steatomatous tumor, presenting the ordinary characters, and successfully removed from the back of a woman by the late Mr. Young.

35. Mr. Walfourd.—Large warty vegetations excised from the perineum of a female labouring under gonorrhœa.

Various Single Specimens.

36. Mr. Walker.—Tuberculated omentum adherent to the parietes and colon. The patient died from obstinate constipation without pulmonary symptoms. The lungs were not examined.

37. Mr. May.—Thickened and contracted omentum, with puckering of mucous membrane, the cause of fatal obstruction. The case has been already mentioned.

38. Mr. May.—Portion of sphacelated intestine, about five inches long and one in breadth, voided by a patient labouring under symptoms of acute inflammation of the serous and mucous membranes of the bowels, but without any symptoms of obstruction. The recovery was slow but progressive. The minute examination of the fragment by Mr. May, at the time of its being expelled, seemed to justify the conclusion that it was intestine, and not false membrane, though, its being a longitudinal and not a cylindrical portion of the bowel, excited differences of opinion as to its nature. Perhaps the most probable conclusion is, that it was a detached fragment of a portion of invaginated intestine, the remainder of the circle being destroyed by sphacelus.

39. Mr. Walfourd.—Portion of a cirrhosed liver.

40. Mr. Boulger.—A very small indurated spleen, weighing less than an ounce, removed from a patient in a state of extreme inanition. The structural change seemed closely analogous to that of cirrhosis of the liver.

Some conversation on the cause and effects of this morbid condition followed, two cases of cirrhosed liver having been narrated, and presenting very opposite symptoms. In one, protracted ill health, great emaciation, but no dropsy, were the concomitants. In the other, great corpulency and general dropsy were present. The latter individual also retained very tolerable health until about three months before death. Your reporter suggested that the tendency to adipose deposit in one case, and not in the other, might be the cause of the great differences in the symptoms during life. Confirmed spirit drinkers almost invariably became fat and puffy if the general health was not materially impaired, and the increased secretion of fat might be considered as supplementary of impeded hepatic function, and thus obviating many inconveniences which individuals of opposite temperaments were almost sure to incur.

The last group we have to analyse is that of

Calculi.

41. Mr. May.—Several specimens of urinary calculi, principally of lithic acid.

In the centre of one was an apple pip; a second was passed in large fragments during life, without medical or surgical interference.

42. Mr. Jeston also presented several large fragments of phosphatic calculus, which a patient of his had passed, after suffering from vesical distress and the alkaline diathesis two years. The muriatic acid had been taken for some time previously.

43. Mr. Taylor.—Sections of urinary calculi, beautifully prepared, with description attached.

44. Mr. May.—Calculi taken from the bladder of a dog.

45. Mr. Harrinson.—Preputial calculus, extracted by incision by Mr. May.

46. Mr. Harrinson.—Large renal calculus impacted in the pelvis of the kidney, the gland itself being atrophied.

47. Mr. Harrinson.—Numerous biliary calculi with distended gall-bladder.

We have now, Mr. President, accomplished, to the best of our power, the rather arduous duty assigned to us by the society, and, while fully conscious that fresh interest might have been imparted to the narration of such varied and interesting detail, had they been entrusted to abler hands, it is but justice to state that some of our omissions have been the inevitable result of imperfect materials, many of the preparations being recorded without any description whatever—a defect we hope, in the ensuing year, to see remedied, by increased attention and diligence on the part of the members.

The great interest of a document like the present is, we conceive, in its being truly representative of our proceedings; and we have purposely avoided giving to your Retrospective Address any other character than that of a history of our own acts and deeds. In conclusion, we cannot do otherwise than congratulate you upon the results of your first year's labors; they have, if we mistake not, exceeded in amount and interest the expectations of the most sanguine amongst us, and more than realised the advantages we mutually expected to gain by our present association. Compared with other analogous societies, we have cause for exultation rather than discouragement; and though laboring in a more limited sphere, and deprived of many of the advantages of our metropolitan brethren, let us not yield to to them in our zealous endeavours to uphold the respectability and promote the true interests of our common profession, by an ardent and steady cultivation of all the opportunities in our power, and by maintaining amongst ourselves that spirit of union and friendly co-operation so essential to individual happiness and to corporate prosperity.

CASE
OF
FEMORAL HERNIA,
SUCCESSFULLY OPERATED ON FORTY-EIGHT HOURS AFTER STRANGULATION.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—I have much pleasure in sending you the following case for insertion in the "Provincial Medical Journal."

Your obedient servant,

FRANCIS BORTON, M.D.,

Physician to the Malton Dispensary.

Malton, August 3, 1842.

It was a correct observation made by the late Sir Astley P. Cooper, and deserving of being retained in remembrance, that hernia was, of all cases, that which required the utmost promptitude of treatment, and application of skill on the part of the medical practitioner; for as to aneurism or stone, they admitted of delay, so that a patient or his friends might consult those who were known to have possessed the greatest opportunities and the most extensive experience in operating in those diseases, whereas, with respect to hernia, there was no time for procrastination—no time for procuring aid from a great distance—consequently, on the experience and nerve of the medical attendants whose services might be required on such occasions, would often depend the life or death of the patient. The case which I am going to relate is an instance of success manifestly resulting from the adoption of decisive measures, and is an illustration of the applicability and importance of the preceding high authority.

Ann Walker, aged twenty-six, unmarried, and whose health at best is only delicate, has been afflicted with femoral hernia, on the right side, for the last five years, and as the truss which she had been in the habit of constantly wearing caused her some pain and uneasiness, she was induced to procure and apply a new one, which she continued to use till within three days of the unfortunate occurrence of strangulation. In addition to this negligence, she had also omitted to attend to keeping her bowels in a state of regularity, and they became constipated. Finding herself to be getting worse, and labouring under great suffering and agony, she sent, on the 27th of June, for Mr. Charles Cobb, of Malton, the surgical attendant on the family in whose service she was engaged, at Wharram-le-Street, a village situate on the wolds of Yorkshire, at about seven miles distance from this place. On his arrival, which was not sooner than twenty-four hours after the bowel had been strangulated, the patient was copiously bled, the taxis applied, a tobacco enema administered, and the taxis a second time tried. These energetic measures not having achieved their object, I was then requested to join Mr. Cobb in consultation. At the time we met about four hours had elapsed since the patient was first visited. We again deemed it advisable to have recourse to the tobacco enema, and to the taxis, but were again disappointed. We then proposed the operation, urging its necessity by stating that death to a certainty would take place, before many hours elapsed, without she consented to it, and that it afforded the only possible chance of saving her life. Notwithstanding all our entreaties, however, she withheld her consent. Cold applications were then directed to be constantly applied to the part during the night, and we left her.

On visiting her in the morning, we found that, instead of there having been any mitigation of pain, &c., the symptoms had increased in violence, and that a troublesome sickness and vomiting, the latter partaking of the stercoraceous character, had come on. Pointing out to her again how her case had assumed a more serious form, and how very critical her situation had become, she gave her consent to the immediate performance of the operation. On Mr. Cobb's commencing the operation, the tumor was large and painful to the touch; the abdomen was slightly enlarged, having a tendency to become tympanitic; and the strangulation had existed forty-eight hours. On opening the fascia propria, about an ounce and a half of yellowish serum escaped, and the sac contained about half that quantity. After the free division of Poupart's ligament, the hernia was still irreducible, the sac being adherent to the femoral vessels and fascia iliaca, and the bowel firmly attached to the sac. The bowel was carefully detached from the hernial sac, which was also dissected from the fascia iliaca and femoral vessels, sufficiently to admit of the return of the hernia after the division of the stricture,

the seat of which was at the neck of the sac. The operation being completed, and the patient placed in bed, five grains of calomel, with five of compound extract of colocynth, were given three hours afterwards; and every three hours a drachm of Epsom salts was given, with fifteen grains of carbonate of magnesia, and every six hours an aperient enema was administered.

June 29. Bowels not moved; abdomen enlarged, tympanitic, and painful on pressure; tongue brown and dry; pulse 120. Bled to twenty ounces; took five grains of calomel and a grain and a half of opium, and repeated three hours afterwards. The bowels moved two hours after the bleeding. Two grains of calomel and one quarter of a grain of opium taken every three hours, and the salts and magnesia continued.

30. Abdomen still tympanitic, but not so painful on pressure; pulse 100; twelve leeches applied; bowels moved. Enema, if necessary, to be daily used.

July 1. Passed a good night; bowels freely moved; mouth rather sore; abdomen still painful on pressure; twelve leeches applied; salts and magnesia continued; one grain of calomel and a quarter of a grain of opium taken night and morning.

2. Abdomen admitted pressure well; tongue cleaner; mouth sore; pulse 100; diarrhœa troublesome. Chalk mixture given, and the calomel, &c., omitted.

3. Not visited. Directed fifteen grains of nitrate of potass, and five drops of tincture of foxglove, to be given every three hours.

4. Bowels not moved since having taken the chalk mixture; abdomen not quite free from pain on pressure; pulse 98. One drachm of Epsom salts, and fifteen grains of nitre, and six drops of tincture of foxglove, were administered every three hours.

5. Not visited. Bowels moved.

6. Abdomen perfectly free from pain; bowels moved, and in a natural state; tongue quite clean; pulse 80; wound rapidly healing. Ordered her merely to take two drachms of salts daily.

On giving her a friendly call on Friday, the 15th of July, I was much gratified to find her perfectly well. A few days afterwards she left her situation, and went to reside with her parents at Tipthorpe, a village not many miles from Wharram-le-Street.

MILLIPEDES DISCHARGED FROM THE HUMAN STOMACH.

By A. W. Davis, M.D., Presteign.

[Read at the Exeter Meeting of the Provincial Medical and Surgical Association.]

A boy, fifteen years of age, the son of a labourer named Griffiths, living in the village of Bucknill, near Knighton, had for some months complained of pain in his stomach, which did not yield to common remedies. On the 9th of June his mother gave him an emetic of antimonial wine, after which he vomited a considerable number of millipedes (wood-lice), an insect of the genus scolpendra. They were mostly alive and full grown, but wanting the brown color of those found in natural situations. These were white. I happened to be in the neighbourhood, and being apprised of the circumstance by my friend, Mr. Warren, I accompanied him to the place, when we were fortunate enough to secure some of the insects, which are now in Mr. Warren's possession. I had the testimony of the mother and neighbours that they would have half filled a common sized teacup.

In a practical point of view, such a circumstance is of little or no value; but I submit this short notice to the meeting from a natural desire one feels to communicate to them whatever is unusual. I think there can be little doubt that the ova had been swallowed by the boy with his food. I find the insects frequently buried in bacon, which is sometimes eaten raw by hungry children.

ON THE MINUTE ANATOMY OF THE LUNGS.

By M. Bourgery.

[Read before the Academy of Sciences, July 11.]

When a thin slice of a dried and inflated lung is examined under the microscope (magnifying from twenty to fifty times), we see that the whole surface is divided into small, irregularly circular cavities, which are divided by septa of various thickness, enclosing the vessels. On examining these cavities carefully, we find that those whose orifices are perpendicular, extend downwards to a considerable depth; hence they are not vesicles, but *canals*. The canals present the same appearance, whatever the inclination of the section of the lung may be. They present every variety of direction, are very flexuous, and communicate freely with each other on all sides. The canal never appears to terminate in a cul-de-sac or blind extremity. Each canal communicates with the neighbouring ones, and, moreover, receives in its passage the orifices of one or more canals; I have counted as many as seven in the wall of a single horizontal one.

Thus, the general idea of the capillary apparatus of the lung is an assemblage of flexuous canals, anastomosing in all directions, but nowhere direct canals without anastomosis, or vesicles. The canals are, as I have said, inclined in all directions, and all communicate with each other, so that the orifice and exit are confounded in the same point; hence each lobule, with its single bronchial orifice, is a miniature of the lung, of which the trachea is at once the orifice and the exit.

I have called these canals the labyrinthic canals, to distinguish them from the branching canals, in which the bronchia terminate.

To understand these latter, we must study the structure of the lobule. Each lobule commonly receives a single bronchial ramification; but if it be large, it may have two or three branches; the small branches terminate laterally in the manner presently to be described, while the continuation of the chief branch descends to the basis of the lobule, and winds round it, giving off branches, to reach one of the angles of the lobule. From the central branch are given off innumerable secondary ramuscles, which radiate from its subdivisions, and which I would call the branching canals; beyond these latter commence the labyrinthic canals. The former terminate in the latter in the following manner:—The bronchial canal, in its trajcct, first opens laterally into one or more

labyrinthic canals, the orifices of which are perpendicular to its line of traject; beyond this it terminates in a small, irregular expansion (*renflement*), which is tortuous and elongated, perforated by one or more labyrinthic canals, and finally ending in one which communicates with the primary bronchial ramification. These are the tortuous ampullæ, pointed out by Malpighi as intermediate between the trachea and vesicles.

The above description of the minute anatomy of the lungs corresponds, in some respects, with those of Malpighi, Helvetius, and Willis, but differs from them in other points. With Malpighi and Helvetius, I think that the capillary air-tubes communicate everywhere with each other, the communications being circumscribed, in man, by the periphery of the lobules; but I differ from them in thinking that these capillaries are canals, and not vesicles.

My theory agrees with that of Willis and Reisseisen in the latter circumstance, but I have given a very different description of the form, number, intricate arrangement, and destination of the canals. According to the old theory, the pulmonary tissue is formed of canals, which, being continuous with the bronchial tubes, traverse the lungs completely, without anastomosing, and end in culs-de-sac; whilst, according to my ideas, it is composed of a peculiar arrangement of canals, which communicate in all directions, and which, instead of terminating in culs-de-sac at the pleural surface, turn in again, and join the deep-seated canals, thus forming a vast and continuous labyrinth.—*Gaz. Medicale*, No. 29.

[The foregoing description of M. Bourgery seems to agree in many points with that of Mr. Addison, an abstract of which we published in a recent number of this Journal.]—Eds.

SUBSTITUTE FOR IPECACUANHA.

The fusiform portion of the bulb of the crinum asiaticum, the bulb itself, and the colorless and sheathing bases of the leaves are of somewhat narcotic heavy odor, are readily dried in the stove, and reducible to powder after desiccation.

From two to four drachms of the recent root or stem, bruised into a paste, and this squeezed through cloth, afford a juice which proves emetic after a few minutes; in smaller quantities it is nauseant and diaphoretic; we have never known it to occasion any untoward symptom.

The dried sliced roots are also an efficient emetic, but require to be given in double the dose of the recent article.

The natives use the bruised leaves with castor oil as a cataplasm to whitlows, and the juice is dropped into the ears in earache.

We were induced to subject this article to trial by Dr. Horsfield's account of its emetic virtues in Java; we administered it in several cases, and found it to act as a certain and mild emetic in the doses we have already mentioned.

The extract, whether watery or alcoholic, is very uncertain in its action.

As this variety of crinum is common in Bengal, and often cultivated in gardens, it is calculated to prove a very valuable addition to the native materia medica. It is indeed the only indigenous and abundant emetic plant we have had experience of, which acts without producing griping, purging, or other distressing symptoms. In the form of syrup it may probably be found to retain the active principles of the recent plant. The tincture of the fresh plant does not succeed, doubtless in consequence of the large quantity of spirit counteracting the emetic effect, by its stimulating energy.—*Dr. O'Shaughnessy, Bengal Dispensatory.*

PROVINCIAL MEDICAL JOURNAL

SATURDAY, AUGUST 13, 1842.

In our last Number we made a few remarks respecting the proposition of rendering the public insane asyla of the kingdom available for the advancement of medical education, on so interesting a class of disease as insanity; but although we confidently anticipated some change would by and by be effected in the exclusive system now too prevalent in all these establishments, we scarcely expected that one of the metropolitan hospitals for lunatics would be so speedily thrown open to the admission of pupils as we now find to be the case. Indeed, even at the moment our observations on the subject were about making their appearance in print, this had actually been decided; and the patients in the wards of St. Luke's Hospital will henceforth be made available, under proper regulations, for the instruction of students in the knowledge and treatment of mental diseases; thereby reviving an ancient, although unfortunately long obsolete, custom, but quite in conformity with the liberal spirit which influenced the governors eighty-five years ago, when the learned Dr. Battie was one of their physicians. We do not pretend to see farther into futurity than any other chronicler of passing events; nevertheless, when speaking of the fact, that two new physicians had been recently elected to St. Luke's, we felt a confident expectation they would not be so wedded to old habits, or the system of exclusion hitherto acted upon, as to prevent their assisting in the cause; and we hoped that the time was now come when more liberal measures would be introduced at St. Luke's, and the wards of that charity would be opened to members of the medical profession. Our anticipations have not been disappointed, as the portals of St. Luke's are no longer shut against students, who will be enabled to visit the inmates of that establishment from which they have for many years been wholly excluded.

This important and, we think, beneficial change in the administration of St. Luke's was, it is reported, agreed upon at the ordinary meeting of the managing committee, held last week, when a resolution of the

board was passed, authorising the physicians to admit pupils to see the patients, and to observe the practice pursued in that hospital; the number and qualifications of those to be admitted, with the other details of this measure, being very properly left to the management of the medical officers. The measure must be carried out with discretion to ensure its complete success, for if any error should be committed in the commencement, besides the discredit thrown upon the plan, the greatest mischief might also ensue. We hail the innovation as a most important move in the right road of improvement, alike creditable to the committee sanctioning its adoption and the medical officers who petitioned the court on the subject. The measure will prove of much benefit, especially to those members of the medical profession about completing their education; and it must be very gratifying to Dr. Webster to learn, that one of the objects proposed in his pamphlet is about being carried into operation,—not certainly at the hospital where the proposition was first mooted, although the example of St. Luke's will undoubtedly lead to its adoption, not only at Bethlem, but we trust in every public insane asylum throughout the kingdom.

Respecting the best mode of fulfilling the object contemplated by the resolutions of the committee of St. Luke's, the great points which, in our estimation, ought to be kept constantly in view are, the clinical instruction of pupils—the treatment, whether remedial or moral, best adapted to the cure of this distemper—and lastly, the pathology of mania, constituting an interesting as well as most important field of inquiry, but one very imperfectly cultivated in this country. We would also venture to suggest that the fees of admission to the hospital should be moderate, for, as pupils have otherwise to undergo an expensive education prior to obtaining their diploma, whilst attendance at an insane hospital not being essential, however useful it will prove, every facility should consequently be given to those anxious to obtain knowledge and practical experience in insanity. At the same time, considering the additional labor which teaching will throw upon the medical officers engaged in that useful department, such circumstances must not be forgotten, as gratuitous instruction is not just to the teacher, and is seldom appreciated by the pupil. Public spirit having opened the doors of St. Luke's to the admission of medical students, liberality and the promotion of science ought to be the presiding genii within, because in this way the institution will become more extensively useful than otherwise, and fulfil the object proposed at the foundation of the charity, "of introducing more gentlemen of the faculty to the study and practice of one of the most important branches of physic." We are, therefore, in favor of moderate fees, and trust this will be the case; for at Bethlem Hospital, the large sum required from students, and the absence of clinical lectures, operate as reasons why even the limited number of three pupils, now allowed, is not always complete; and we should object to indiscriminate admission, as in the French hospitals, both for the comfort and well-being of the patients, as for the students themselves, who are more likely to be zealous in their attendance when admitted for a limited period and at a moderate expense, than under an opposite system. For these reasons we entirely concur in the opinion expressed by Dr. Webster, that "the expense entailed upon the medical student ought not to be considerable, lest the object proposed might thereby be materially interfered with, or even, perhaps, wholly defeated." Any other principle would be unjust; and we shall, therefore, look forward with considerable interest to the proceedings consequent upon the new move now made at St. Luke's, whilst we hope the anticipations expected to flow from the proposed measures, by the friends of sound practical education, will be amply realised.

Dr. Webster observes, in his pamphlet, that "a new light has at last broken in upon the managers of some of our great public establishments for lunatics, which has been followed by others; and however slow may be the progress of reform, the cause of medical science and public utility will in the end prevail over every obstacle." This, fortunately, is now the case at St. Luke's, where "utility and reason," as in the time of Dr. Battie, appear to have resumed their sway, and to point out the path for others to pursue. But what influence this will eventually have upon the authorities at Bethlem Hospital must soon be evident, as they cannot surely now lag behind, or allow that splendid charity to occupy an inferior station. Hanwell and St. Luke's have taken the lead in the question of medical education respecting insanity, although the proposal to open the doors of public insane asyla to medical students was first mooted at the quarterly court of Bridewell and Bethlem Hospitals in January last, by Dr. Webster. However, whether leading or following in the wake of public opinion, Bethlem Hospital must soon become a clinical school for the instruction of medical practitioners, and those about entering upon the active duties of their profession, for which purpose it is so admirably adapted from situation, extent, and other requisites unnecessary to mention. In reference to that charity, Dr. Webster observes, "Although I am not so sanguine as to expect that old prejudices and customs, however detrimentally they may act upon society, can be suddenly removed; nevertheless, the wants of the community, and the general benefit of mankind, will finally triumph over every difficulty; and, however contrary to previous practice, or opposed to usually received opinions may be the innovation I propose, I do not despair of its ultimate adoption."

Undoubtedly changes are not easily brought about, especially in ancient corporations, and those so rich as to be almost independent of public opinion; still we believe the time is not far distant, as Dr. Webster appears to think, when Bethlem Hospital will be made subservient to the instruction of students, in the same way as St. Bartholomew's, Guy's, or the county hospitals. In the wish of such a consummation we cordially join; and shall be happy if enabled in a future number to announce the gratifying fact of that institution having followed the excellent examples of Hanwell and St. Luke's.

MEDICAL REFORM.

We have received a printed document, the production of a professor attached to Marischal College and University of Aberdeen, on the subject of medical reform.

The writer's object is to explain a plan "for establishing one examining board in Scotland, for examining general practitioners in medicine and surgery, composed out of all the existing examining bodies in that part of the United Kingdom."

The following is an analysis of the professor's "memorandum:"—

At present there is no general licensing board for Scotland. The College of Surgeons of Edinburgh possesses the exclusive power of granting licenses to general practitioners through eight counties, having a population of about 500,000 persons. The faculty of physicians and surgeons of Glasgow possess a similar power, extending over four counties, and 800,000 persons. The remaining twenty-two counties, comprising a population of 1,300,000 persons, are exempted from all medical control or jurisdiction, and, therefore, present a kind of neutral ground for the licentiates or graduates of the other Scotch corporations.

It would appear, however, that the University of Edinburgh, in conjunction with the Glasgow faculty, has been endeavouring to play the same game as our own metropolitan corporations, and to obtain from Sir James Graham an extension of their power over the whole of Scotland, and the consequent suppression of Aberdeen, St. Andrew's, &c. The Aberdeen professor naturally exclaims against this injustice, and proposes a plan whereby he thinks the interests of all may be accommodated to the public good. For this purpose two educational testimonials should be adopted, the ordinary license and a university degree.

The former should be imperative on every practitioner of medicine or surgery; the latter voluntary; but it should, in no case, be conferred on any candidate who had not previously obtained his license from the general board. As this latter proposal involves considerable concession on the part of the universities, it is proposed to compensate them by giving them a certain share in the examinations of the licentiate. Thus, supposing the number of departments of examination of the candidate for the license to be eight, then eight examiners might be appointed by the universities in rotation, and eight others by the provincial corporations, and the examiners would be called upon to fulfil their duties, each in his turn. The board might hold its examinations in the place or places deemed most expedient.

In our next Number we shall give a full report of the anniversary meeting of the Provincial Association at Exeter.

ACADEMY OF SCIENCES, PARIS.

August 1.

CAUSE AND TREATMENT OF GOITRE.

M. Pascal presented a few remarks on this subject. The observations of MM. Benedict, Foderé, and Roulin, seem to have established, first, that exposure to stagnant moist air, whether hot or cold, is the chief predisposing cause of this disease; and, secondly, that the use of impure water for drink is the usual exciting course. The author then directs attention to the following fact:—About three leagues from Mentz there are three villages, apparently under the same conditions of situation, &c. Many years ago it had been observed that goitre was extremely common in two of the villages, but unknown in the third, which last possessed a mineral spring containing iron, which supplied water to all the inhabitants of the village. Even the inhabitants of the two unhealthy villages lost their tendency to goitre, when they came to inhabit the neighbourhood of the mineral spring.

Since the time alluded to, however, the disease has nearly disappeared from the three villages, in consequence of the improved condition of the people, the greater attention to the construction of their dwellings, &c. From these facts the author concludes, first, that, in spite of humidity and want of circulation of air, the use of water containing iron, prevents the development of goitre, and cures this disease when recent; secondly, that, independently of chalybeate water, proper attention to cleanliness, ventilation, &c., contributes powerfully to prevent the development of the disease.

ACADEMY OF MEDICINE, PARIS.

August 2.

STRUCTURE OF MILK GLOBULES.

M. Delens presented a report on a memoir of M. Mandl relative to the structure of milk globules.

M. Mandl regards the milk globule as composed of two parts; a central one containing the principle of butter, and a small membrane which serves as an envelop. This is a highly important point to decide, for on it depends the doctrine of the vitality of certain fluids. To decide it we must carefully avoid any means by which the natural structure of the milk globules may be altered. The means adopted by M. Maundl consists in pressing the milk between two

plates of glass, which are made to glide in opposite directions. When this is done, we see a number of oily globules, and the remains of lacerated membranes, which assume great variety of shape and dimension. This experiment seems to the author a conclusive proof of the fact that the milk globule is composed of an oily nucleus enclosed in a membrane; but the reporters have confirmed the theory by experiments of their own, and cleared up some doubts which they were, at first, inclined to entertain. Thus, when the milk is pressed between the glass plates, and the globules ruptured, the thickness and length of the membranous shreds seem inconsistent with globules of so minute a diameter as the milk globules are. But on mixing a little water with the milk, and watching the effects of graduated pressure, it was seen that the pellicles were much finer and more delicate than when undiluted milk was employed, because in the latter case the pelicles stuck to one another. On extending the microscopic researches to the pollen of mercurialis, and other parts of plants which contain globules, it was found that pressure between glass plates sometimes gave rise to the same appearances as were observed in milk.

NEWCASTLE-ON-TYNE INFIRMARY.

[*Practice of Sir John Fife.*]

(Report by Mr. Williamson.)

LITHOTOMY.

John Smith, aged fifty-two, a countryman, was received into the Newcastle-on-Tyne Infirmary on the 28th of July, 1842, under the care of Sir John Fife, with calculus vesicæ.

He states that about four years ago he passed a small red stone, having the form of a cherry-stone, and since then has felt more or less pain in making water, but he has not passed any more calculi since that period. His attacks recurred about once a-month, and he was obliged to have the stone forced back with a sound to enable him to void his urine. Previous to his being troubled with the disease, he used to pass sand in his urine.

The bowels open; he looks strong and healthy. He was ordered to take twelve grains of Dover's powder, with two of calomel, at night; an ounce of castor oil in the morning, and a warm bath.

Lithotomy was performed on the 2nd of August.

The staff having been introduced before the patient entered the theatre, bandages were applied in the usual way. The staff had a lateral groove; its handle was kept perpendicular to the abdomen. The first incision was made deep at the upper part, on the side of the bulb of the urethra, and gradually less deep as it reached the tuberosity of the ischium; the urethra was readily divided, with part of the prostate gland. On introducing the forceps and grasping the stone, it proved so large that a further division of the prostate became necessary, and this was done with a straight bistoury. The stone was again grasped in its smaller diameter, and gently extracted.

An elastic gum tube was then introduced through the wound into the bladder, and the patient taken to bed. The calculus looked like the lithate of ammonia, and weighed thirteen drachms.

August 3. Had no rest during the night; is feverish; pulse 100, and full. Ordered to be bled to fifteen ounces, and to take half an ounce of castor oil in an ounce of mint water immediately.

4. Had a good night's rest; the febrile symptoms have in a great measure left him; pulse 85, and soft; bowels free; the urine passes through the wound.

5. Did not rest well, as he had an opiate pill given him last night, and thinks that it was the cause of his restlessness; bowels have not been opened since yesterday morning.

℞

Aloetic pill, twenty grains;
Calomel, four grains;
Oil of mint, two drops. Divide into four pills; one to be taken at once, and repeated every three or four hours if required. To have some broth.

6. Slept well; bowels open; water passes through wound; is doing well.

7. Rested well; pulse 76; rapidly improving.

8. Doing well.

9. Convalescent.

CATARACT.

Edward Slater, aged 58, was admitted into the Newcastle-on-Tyne Eye Infirmary, on July 26, 1842, under the care of Sir John Fife, with double cataract of twelve years' standing. As his general health appeared good, the pupils well dilated, bowels open, &c., Sir John thought better to operate immediately than keep him in suspense. The eyelids were held without any speculum, and the operator stood in front of the patient, using the left hand in operating on the right eye, and *vice versâ*. The capsule of the lens was opened while making the puncture, so that the cataract rolled gently out as soon as the incision was completed. In each eye the flap was made upwards, but great care was taken to lay the edge of the flap smooth before closing the eyelids. A little ceratum cetacei on linen was laid over the cilia, and then a plaster of ceratum belladonnæ over the orbit. In the evening about sixteen ounces of blood were taken from the arm, and two aperient pills were ordered, consisting of aloetic pill, with a little calomel.

27. Free from pain.

31. The eyes were opened this morning, and the patient has some vision. To be dressed with ceratum belladonnæ spread on linen. The eyes to be kept closed.

Aug. 2. Omit belladonna; doing well; eyes allowed to be open.

8. He left the hospital this morning, and was ordered a solution of nitrate of silver to be dropped into the eyes twice a-day for a while, and also some aperient pills to take occasionally. Vision distinct; appearance of the eyes perfect.

James Scott, aged fifty-eight, has been a patient of Sir John Fife's for these last three years, but was admitted into the Eye Infirmary on the 26th of July, 1842, with cataract, complicated with amaurosis. He states that, about eighteen years ago, he got a severe blow upon the back part of his head, ever since which he has been troubled with more or less pain in the head; a year or two after he found his vision become more affected, and has gradually got worse up to this period.

Before the operation was performed he could scarcely distinguish the flame of a candle in a dark

room. The bowels are open; pupil contracted, although he had belladonna applied previously. His left eye being the worst, was operated on, as in the former case.

Sir John ordered about twelve ounces of blood to be taken from the arm, some opening pills, and the eye to be dressed daily with ceratum belladonnæ.

July 30. Can see light; continue belladonna; doing well.

August 2. Omit the belladonna.

6. Dismissed this morning. Ordered to take some opening pills, and to drop the solution of nitrate of silver into the eye twice a-day. He can see when anything is held before his eyes, but cannot distinguish minute objects without the assistance of a lens.

ASSURANCE OFFICE FEES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—It appears to me that the question at issue between life assurance offices and the profession has never been fairly stated and weighed, and that the ill-feeling which has been engendered has arisen from a misunderstanding of the real bearings of the case.

I will endeavour briefly to state the case, which, when candidly considered, will I think relieve the offices from unmerited reproach.

An individual applies to the directors of a company to effect an insurance upon his own life, or on that of another, which they consent to grant upon the following conditions:—

1. That a certain annual payment be made to the company during the continuance of the policy.

2. That a medical certificate be produced to prove that the life is insurable.

The production of this certificate is an *essential* part of the contract, and it is as incumbent on the person wishing to insure a life as the payment of the annual premium. If this be attended with expense, the applicant must defray it.

That the medical referree is entitled to payment for his services there can be no doubt; but he must look for it to his employer, not to the office; for although the letter of application, together with the usual questions, issues from the office, they are only the *agents* of the individual wishing to insure the life, and this letter issues from the directors, both to prevent collusion between the parties, and to give the medical man the opportunity of speaking freely without the possibility of his communication being known.

If life insurance offices consented, or were liable, to pay for medical certificates, a door would be open to the grossest imposition; for nothing would be easier than for an unworthy intruder into the profession to get an unlimited number of persons to make applications for insurances on their lives; the certificate is obtained, the fee paid, and nothing more may be heard of the matter.

There is, however, an apparent want of fairness, on the part of the directors of a company, in availing themselves of our services without at the same time of their applying for certificates, pointing out the source from whence we are to expect payment, and I think that some good effect may be produced by the public announcement of a resolution of the great body of practitioners, that "No answers will be given to questions proposed by life insurance companies, unless at the same time the directors state from whom the medical referree is to obtain payment for his services." Such a resolution would obviate the necessity of anything like a pledge that no notice will be taken of letters from life insurance offices, unaccompanied with a fee; for there are many circumstances which would induce us to forego the claim of which the medical man alone is a competent judge, and experience has taught us that in the long run we are no losers by acts of kindness and liberality extended to our neighbours.

I remain, Gentlemen,

Your obedient servant,

W. Sweeting.

Abbotsbury, July 27, 1842.

PROFESSIONAL ETIQUETTE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—In justice to the profession to which I belong, I lay the following glaring case before the public. Had it been a single instance from the same quarter, I might not have noticed it; but as it is only one out of many, equally bad, I select it as of most interest.

I remain, Gentlemen,

Yours obediently,

William Reeves,

Surgeon to the Carlisle Dispensary.

Carlisle, August 8, 1842.

A young man, a dispensary patient under my charge, labored under stone in the bladder, for which I advised him to submit to an operation. I stated to him that I would perform the operation in his own house, or, if he preferred it, he might go to the infirmary, where more conveniences would be provided than he could otherwise have. This, the young man said, he would decide upon in a short time. However, in the meantime, the apprentice to a general practitioner in this town, Mr. Elliot, met the young man in a joiner's shop, on leaving which the patient said, "I must go and see Mr. Reeves at the dispensary." The apprentice asked what ailed him, and the patient answered, "I have got a stone in the bladder." The apprentice then advised him to call upon Mr. Elliot, and the lad did so. After the patient had answered Mr. Elliot's questions, and stated that Mr. Reeves had advised him to submit to an operation, Mr. Elliot intimated that if he allowed himself to be operated on he would surely die, and at the same time read to him some statistical table, showing that almost every one died after an operation for stone. Mr. Elliot then proceeded to examine him—stated that there were two stones, and that he could cure him without cutting, or any danger. This the man gladly listened to, and came and told me what I have above stated. I told him I never discovered more than one stone, and if Mr. Elliot had persuaded him to the contrary, he

would ultimately find out his mistake. At the same time, I told him that no operation could be unattended with danger.

After a short time Mr. Elliot operated, cut down upon the membranous portion of the urethra, dilated the prostate, and took away one small stone.

COLLECTANEA MEDICA.

FROM THE NOTE-BOOK OF

J. D. JEFFERY, Esq., Surgeon, Sidmouth.

ASTHMA COMPLICATED WITH CARDIAC DISEASE.

It may seem strange, but I believe it strictly true, that since I fixed my attention, now several years ago, more expecially on pectoral diseases, I have scarcely met with a case of supposed asthma, in which pulmonary organic disease, and cardiac disease likewise, have not appeared to me clearly developed in the shape, more especially, of bronchitis or emphysema of the lungs, and of simple hypertrophy of the heart.—*Dr. Clendinning, Med. Gaz.*

DRY CATARRH AND ASTHMA.

Indication.—Swelling, with an obscure redness or violet hue of the mucous membrane.

When the bronchial tumefaction becomes more extended, dyspnœa is then experienced, even in a state of quietude, and particularly after meals; and this state of oppression is referred by some patients to one side only, and sometimes to the side least affected.

After a time, the dyspnœa comes on in fits, which usually lasts several days, and are so severe as to merit the name of asthma.—*Laennec, Diseases of the Chest*, p. 93.

RHEUMATIC PERICARDITIS ENDING FATALLY.

Jan. 1841. During this month I attended Frederick Smith, aged seven; had been ill some days prior to my visit. Symptoms: Pulse 120; profuse perspiration on the surface of the body; dry, brown coated tongue; great pain in the limbs, back, and chest; respiration difficult; heart's action very great, and much stronger in comparison with the force of the pulse at the wrist; urine high colored, with thick whitish deposit; bowels rather confined.

Treatment.—I first gave a mercurial aperient, followed by a draught, containing three grains of Dover's powder, to be taken every four hours; tincture of digitalis, ten drops; saline mixture, one ounce; with a powder containing two grains of calomel; eight leeches over the cardiac region. No relief in two days; heart's action increased; the leeches repeated, which bled profusely; blister over the leech bites, which rose very well; continue the calomel and draught as above, adding four drachms of tincture of opium to each. The boy complained of great pain at the heart, and constantly groaned; no relief followed; the heart's action was excessive, and the sound was confused and struggling. The patient's strength greatly diminished, and death took place after about ten days' illness.

Post-mortem.—External: Body thin; left side of the chest much elevated above the right, and evidently larger. Internal: On turning back the sternum, the pericardium was found adherent to it by injected cellular tissue to some extent.

A vertical incision of the pericardium being made, it was found adherent to almost the whole anterior surface of the heart; I was obliged to dissect it carefully off, when the anterior and posterior surfaces of the heart were found to be covered with a semi-flocculent, net-work like investment of coagulated lymph, the internal surface of the pericardium presenting the same appearance; the sac contained about four ounces of thick yellow and almost gelatinous serum; the heart was enlarged considerably.

Remarks.—In the first place, I believe no human means would have arrested the disease at the time I was called; it had most probably been going on in a quiet though active form for some time; the boy was often observed to be soon out of breath, and to suffer from palpitation of the heart. I had attended him four years before (he being then only three years old) in a well marked case of acute rheumatism. I recollect then his pain was so great that his screams were distressing.

Secondly, this case is interesting as a well-marked case of rheumatic pericarditis or "metastasis." The post-mortem examination enabled me to verify the diagnosis, and to see the processus ad mortem of this painful and dangerous disease. The adherence of the pericardium to the walls of the chest, and again to the anterior surface of the heart, enabled me to understand that "confused and struggling" sound of the heart which I had heard, and to know also that that organ can perform its office, even when held in bondage, as it were, by the plastic effects of inflammatory disease.

INDIAN MOXA.

The use of moxa, or of actual fire, to the surface of the body is a favorite practice in all savage and even half civilised nations. In China the down of the artemisia chinensis is set on fire, and the burning end applied directly to the part. In India a red hot *gool*, or hookah pastille, is usually employed. In Italy a small flame of hydrogen has been lately tried, and in Germany it is a common practice to place a particle of phosphorus on the skin, and then ignite it. The object in all is to effect counter-irritation, and the usual cases in which it is applied are chronic rheumatism, sciatica, neuralgia, deep seated diseases of the bones, cartilages, or ligaments. In India *gools* are used by the native empirics for almost all diseases, especially for enlargements of the spleen and liver.

The most disastrous effects often succeed the application of the cautery in this or any other form to the tendinous parts, such as the wrist, back of the hand, temple, &c. We have witnessed three fatal cases of lock-jaw induced by the cauterisation of the wrist by an ignited gool.

To prepare an excellent substitute for Chinese moxa take fine cotton, soak it in a solution of saltpetre in cold or tepid water, dry it before the sun; when dry, press it into cones of various sizes from half an inch to an inch and a half in diameter at the base, and about two inches high. To apply these cones press one on the part by a wire ring or a pair of forceps, ignite the apex of the cone, and blow gently on it through a reed, to facilitate the combustion. The moxa should be removed before it has burned quite down to the skin; a blistered surface is thus at once formed which usually sloughs, leaving an open suppurating sore, rather difficult to heal.—*Dr. O'Shaughnessy, Bengal Dispensatory.*

RETROSPECT OF THE MEDICAL SCIENCES.

WARTS IN THE VAGINA.

The vagina and external parts are sometimes so covered with warts that the progress of labor is impeded, as well as the suffering of the patient considerably augmented. These impediments are generally found in women of loose character, the worst of prostitutes, &c., and their existence is not generally made known to the attendant before the accession of labor. If, however, he be informed of their presence, he should employ the remedies calculated to remove them before the commencement of parturition.—*Guy's Hospital Reports.*

DEGENERATION OF THE FACIAL AND CRANIAL BONES.

Dr. Chambeyron, of Rennes, has published a curious case, occurring in the person of a lunatic under his care, in whom some of the bones of the face and head were reduced by the removal of their calcareous structure to the consistence of cartilage. The examination of the body after death was made in a hurried manner, but the petrous portions of both temporal bones, the basilar process, and the body of the sphenoid, formed an homogeneous mass of lardaceous structure, and barely distinguishable, *inter se*, by obscure mobility. Their normal texture was entirely lost, and they were easily cut with a knife; the alæ of the sphenoid, and the squamous portion of the right temporal, were cartilaginous; the left squama, the æthmoid, and frontal, were not diseased. Here and there a spicula of bone might be met with. Among the facial bones, those of the nose, the vomer, and the left malar and superior maxillary, were the most intact. The orbital plate of the right superior maxillary bone was reduced to a mere floating membrane, and the anterior paries had been absorbed, exposing the antrum, lined with ragged gangrenous membrane. There was merely a rudiment of cartilage for the nasal process, the inner wall of the sinus being destroyed, and the turbinated bones, floating loosely, suspended by the Schneiderian membrane. The palatine arch was cartilaginous, and the lining mucous membrane had scarcely a tinge of red where it covered the diseased bone, from which it was easily separated. The eye was perfectly in its place, retained there by the soft parts, which gave it support. The body of the inferior maxillary bone was cartilaginous; but the condyle, the neck of the bone, and its coronoid process, had almost entirely disappeared. The masseter muscle was shortened, indurated, and projecting. The teeth were all sound, and, with but few exceptions, in their place, and occupying their proper plane.

The patient was forty-nine years old, of middle size, thin, but not excessively so, of a pale, earthy complexion, without any indications of struma or cancer. The following is Dr. Chambeyron's *resumé* of the case:—The chondroid or cartilaginous ramollissement presented a series of phenomena precisely inverse to those of osteogenesis. The bones were first reduced to the state of cartilage by the abstraction of their calcareous phosphates, then to the cellular state, and were afterwards absorbed, the whole proceeding being accompanied with severe pain, but without any swelling of the parts, discharge, or collection of pus. It is scarcely possible, therefore, that this alteration of tissue was preceded by any inflammatory attack. There was not during life any symptom of inflammation, either general or local, and the appearances after death did not warrant the tracing the disease to that source. There was a distinct line of demarcation between the healthy and diseased bone. The nerves were not examined.—*Journ. des Connaiss. Med. Chir.*

ABSORPTION OF MINERAL SALTS IN CASES OF POISONING.

Orfila has recently made a series of experiments, to show that the salts of lead, bismuth, tin, silver, gold, zinc, and mercury, when taken into the system, are absorbed by the organic tissues, and may be discovered in them by a properly conducted chemical analysis.

Salts of Lead.—The nitrate of lead was the salt subjected to experiment, from twenty to thirty scruples dissolved in water being administered to a dog, the œsophagus and penis being immediately tied. Directly death occurred, the liver, spleen, and kidneys were removed, and found to contain lead resulting from the poisoning. The liver and spleen, cut into small pieces, were boiled for an hour in a porcelain capsule, the decoction filtered, and evaporated to dryness, the residue being carbonised by nitric acid, and the carbon, finely powdered, treated with hot, pure, and diluted nitric acid. The filtered solution, evaporated to dryness, and dissolved in distilled water, gave a precipitate of black sulphuret of lead with sulphuretted hydrogen, which, after having been washed and treated with weak nitric acid, yielded sulphur and nitrate of lead. This liquid also gave a yellow precipitate with the ioduret of potassium, and a white one with the sulphate of soda. The kidneys were submitted to a similar experiment, but with acetic instead of nitric acid, the same effects resulting. The urine and the membranous bag of the stomach were found equally to contain traces of lead. The value of these experiments was enhanced by the performance of similar ones on dogs which had not been poisoned, and where, consequently, lead was not found. The urine of a female patient of M. Villeneuve, who had swallowed from thirty to forty scruples of acetate of lead, passed twenty-five hours after the poison had been taken, gave unequivocal traces of the presence of the poison.

In performing these experiments, care must be taken never to heat the nitric carbon to red heat, as by so doing a portion of normal copper and lead will be dissolved, and yield indications of poison with the sulphuretted hydrogen, even where none has been taken. Another important source of error consists in the filtering paper generally in use containing abundant traces of a compound of lead, so much so that if an acid liquid be filtered through it, and afterwards tested, sulphuretted hydrogen will give a black, and the ioduret of potassium a yellow, precipitate. The ordinary grey paper has yielded notable quantities of copper, and the joseph paper has also given traces, so that in all cases where these filtering papers are used, they should be well washed previously with a dilute acid, until there are no longer any traces of these metals discoverable. It would be better, however, in the prosecution of delicate experiments, to use the paper of Berzelius.

Salts of Bismuth.—From eight to ten scruples of the crystallised nitrate of bismuth, dissolved in distilled water, and consequently changed into an acid nitrate and sub-nitrate, were given to a dog, and the same precautions taken as in the previous experiment with the lead. The animal was killed at the end of twenty-four hours, and the liver, spleen, &c., immediately removed. These organs, cut in pieces, were boiled for an hour and a half in a porcelain capsule, with a diluted pure nitric acid, the filtered solution evaporated to dryness, and the product carbonised by strong nitric acid; the carbon treated with dilute nitric acid, and afterwards with distilled water, gave a white precipitate of sub-nitrate of bismuth, and the soluble acid nitrate; the liquid and the precipitate treated separately with sulphuretted hydrogen, gave a black sulphuret of bismuth. This sulphuret may be shown not to result from the lead or copper naturally contained in the liver and spleen, by washing it with distilled water, and treating it with dilute nitric acid, when sulphur will be thrown down, and the nitrate of bismuth remain in solution. The urine, evaporated to dryness, and the stomach treated in the same way as the other organs, will yield traces of bismuth, shown by sulphuretted hydrogen causing a precipitate of the sulphuret of that metal. The same organs of a healthy dog, not previously poisoned, did not give any indications of the presence of bismuth when similarly treated.

Salts of Tin.—Six or eight scruples of the protochloruret of tin being introduced in the stomach of a dog, the animal destroyed after the lapse of twenty-four hours, and the liver and spleen removed directly, the salts of this will be found to have been absorbed. A similar process to that previously detailed being adopted with these organs, except that hydrochloric acid is used instead of the nitric, the latter being employed as the carbonising agent only, the addition of sulphuretted hydrogen will give a yellow precipitate of bisulphuret of tin. If the precipitate be a brownish yellow, it will indicate the presence of organic matters, which should be destroyed by strong nitric acid. The same results will be obtained from the urine and coats of the stomach. From the contents of the last-named viscus, the metal itself may be obtained by evaporating the yellowish liquid to dryness, and carbonising the residue by strong nitric acid. The metal is obtained from the carbon, by treating it with aqua regia, filtering, separating the oxide of tin by ammonia, and reducing it by carbon.

Salts of Silver.—If four or six scruples of nitrate of silver be given to dogs in solution, they will generally cause death in fifteen to twenty hours. The liver and spleen, taken away directly, and carbonised by strong nitric acid, and then treated with boiling diluted nitric acid for a quarter of an hour, will give a solution containing the nitrate of silver, which, filtered, with addition of hydrochloric acid, will give a precipitate of the white curdy chloruret, from which metallic silver may be procured. The carbon obtained by evaporating the urine to dryness, and continuing the heat until that effect is produced, will yield the chloruret if in contact with liquid ammonia for an hour or two. The stomach also contains a notable quantity of silver. Orfila cites a case from Rust's Repertorium, where the nitrate of silver was given for eighteen months for the cure of epilepsy. At the end of that time the patient died, and on examination of the body all the internal organs presented more or less of the same blue tint as the skin. Brande obtained a notable quantity of silver from the plexus choroides and pancreas. In another case, when the nitrate of silver was given internally for epilepsy, Landerel detected the presence of the chloruret in the urine.

Salts of Gold.—If the liver and spleen of a dog to whom the hydrochlorate of the chloruret of gold has been given, are carbonised by nitric acid in a porcelain capsule, and the carbon kept at a red heat for twenty or twenty-five minutes in the same capsule, lamellæ of metallic gold will be found in the midst of the ash. The mass being treated with dilute nitric acid to dissolve out the salts, and the liquid decanted, the remaining powder must be boiled in aqua regia, and the solution diluted, filtered, and evaporated to dryness, when a hydrochlorate of the chloruret of gold will be obtained, which, by a gentle heat, will be decomposed into chlorine, hydrochloric acid, and gold. The urine and stomach will also yield it.

Salts of Zinc.—The viscera of dogs destroyed by the sulphate of zinc will, in like manner, show that the poison has been absorbed. The ash resulting from the carbonising by strong nitric acid, treated for twenty minutes with diluted hydrochloric acid, will yield the chloruret of zinc mixed with a little chloruret of iron. If the greater part of the free hydrochloric acid be saturated by potassa purified by alcohol, and a current of washed sulphuretted hydrogen be passed through it, sulphuret of zinc will be precipitated. This sulphuret ought to be a milk white, but it will be slightly yellow from the presence of a little sulphuret of iron. The stomach, similarly acted on, will give the same results.

In every case the ligature of the œsophagus and penis was deemed essentially necessary. M. Orfila concludes by observing, that the metallic salts upon which he has experimented have really been absorbed, and not conveyed into the organs after death by imbibition, the animals having been opened in each instance immediately after death, and the liver and spleen at once removed.—*Journal de Chimie Medicale*, June, 1842.

HÆMORRHAGIC DIATHESIS.

To constitute the hæmorrhagic diathesis, says Mr. Miller, the successor of Sir Charles Bell in the chair of surgery at the Edinburgh University, we have not only the blood flowing through dilated and non-contractile tubes, but sent thither in greater volume than in ordinary and healthy circumstances, thinner and more fluent than in health, and little, if at all, able to arrest its own course by assuming the solid form. In addition, the capillary tunics are not only thin, but weak, and easily lacerable: a slight bruise produces serious ecchymosis; coughing may soon induce hæmoptysis; a sneeze brings on epistaxis; diarrhœa occasions copious evacuations of blood by the rectum; and extravasations are not unlikely to follow but slight causes within internal cavities. The whole circulating system, besides, is usually in an irritable and excited condition, the pulse being considerably above the healthy standard, and the heart acting with unusual force and sharpness. Not unfrequently a febrile condition exists at the same time, and when it does, it

increases the intensity of the diathesis. At the same time the blood contains a less proportion, both of fibrine and of globules, than in health; in consequence it predisposes to capillary congestion, and is more or less deficient in the power of coagulation.

The best means of correcting the tendency to hæmorrhage, when there is not actual loss of blood, is by the use of good and nutritious, not stimulating food, thereby increasing the quantity of fibrine in the blood, and the general tone of the system. Pure air is indispensable. At the same time frequent and small doses of the sulphate of soda, as a hydrogogue cathartic, should not be omitted.

When hæmorrhage has commenced, energetic treatment must be at once adopted, for then and then only is the blood in a condition at all favorable to coagulation, and the parts in a state admitting pressure. With respect to internal remedies, astringents and sedatives, such as the acetate of lead with opium, with cautious doses of antimony and ipecacuan, so as to induce and maintain nausea, short of emesis, may be administered, together with occasional smart doses of the sulphate of soda given as a hydrogogue. At first it would be as well to abstain from food, but, should the hæmorrhage continue, it would be necessary to support the strength and circulation by nutriment frequently given in small quantities, as soup, animal jelly, &c., avoiding aqueous fluids, as increasing the serum of the blood, already too abundant, wine, brandy, and all other stimulants, unless driven to them at the eleventh hour in despair.

Of the local remedies, accurately applied but moderately exerted pressure, directly over the part furnishing the hæmorrhage, with uniform support of the lower parts when necessary, is the most important, at the same time favoring as much as possible the application of atmospheric influence, and never trusting in a soaked and oozing compress, but instantly removing it to make way for a more accurate re-adjustment. The application of escharotics, especially of the actual cautery, is at the best only occasionally and temporarily beneficial, and ultimately highly pernicious. Irritants and cupping at some distance from the bleeding point are not unlikely to be of service; the former by creating an inflammation in a comparatively unimportant part, and thereby increasing the amount of fibrine in the general mass of the blood, the latter by averting the sanguineous determination to the source of hæmorrhage.

Failing all these, we still have transfusion to fall back upon. The manner in which this is likely to benefit is clear. We have blood deficient in globules and fibrine, especially the latter, and of this also a large quantity has been lost. By transfusion we are enabled to supply its place with a healthy fluid in every way fitted for the purposes of life, care being taken that the person from whom the blood is drawn is not only in sound health, but free from plethora.—*London and Edin. Monthly Med. Journ.*, July, 1842.

CIRRHOSIS OF THE LUNG.

Dr. Stokes exhibited to the Pathological Society of Dublin a specimen of that disease of the lung, first described by Dr. Corrigan under the title of cirrhosis of the lung. Its general characters are, a tendency to consoldidation or contraction of the pulmonic tissue, with dilatation of the bronchial tubes. Dr. Stokes' patient had been laboring for months under cough, with dyspnœa and hectic fever, and died two days after her admission into the hospital. The physical signs were dulness of sound on percussion over the upper part of both lungs, but no decided or unequivocal signs of cavities. The appearance of the lungs on dissection was very characteristic; the left, which was the more diseased, was greatly diminished in size, and very irregular on its surface, so that when the hand was passed over it numerous small bodies could be felt, conveying to the fingers the impression of tubercles existing on the surface of the organ; this was produced by the presence of air vesicles. On making a longitudinal section of the trachea and primary divisions of the bronchi, the right bronchus, immediately after it branched off from the trachea, became greatly dilated, so as to exceed the latter in diameter, while the left bronchus was evidently contracted and reduced below its ordinary calibre, but dilated again a little further down.

At a subsequent meeting, Dr. Greene exhibited another specimen of pulmonary cirrhosis, with dilated bronchial tubes, closely resembling phthisical cavities, taken from a woman who had long suffered from intractable cough, and who was affected with a train of symptoms closely resembling phthisis. The physical signs were, cavernous respiration and distinct pectoriloquy in the right infra-clavicular space; the latter sign was also found at the inferior angle of the scapula, and in the right axilla; distinct gargouillement, with bronchial respiration could be heard in various parts of the chest. The left lung presented the signs of bronchitis. The lung, on examination after death, was found to be diminished in size and indurated; the cavities formed by the dilatation of the tubes were of considerable size, and did not contain purulent matter; they were largest near the surface of the lung, and towards its upper part. Their cartilaginous structure could be distinctly traced. There was not any sign of tubercular deposition in either lung. The pleura was greatly thickened, and the diaphragm was adherent to the liver.

Laennec attributed this complaint to constant cough, and accumulation of mucus in the bronchial tubes. His opinion is, however, liable to objection, and his account of the causes to which the dilatation is owing is not sufficient to explain all the phenomena. According to Dr. Corrigan, the primary seat of the disease is in the web of cellular tissue which constitutes the matrix of the lung, which has a tendency to contract, so as to produce, when the disease is advanced, a very considerable obliteration of the air-cells. He thinks the diminution of the lung the first step in the disease, of which the dilatation of the bronchi is a consequence.—*Dublin Medical Journal*, May, 1842.

RE-UNION OF THE FACE.

Dr. Odelph, of Luxeuil, in the Haute Saône, narrates the case of a woman, fifty years old, who was wounded in the following extraordinary manner:—A cow forced its horn into the back part of her mouth, behind the posterior aperture of the nares, and then violently tore away in one piece all the bones and soft parts forming the nose, the nasal fossa, the palatine arch, the superior maxilla, the internal parietes of both orbits, &c. Dr. Odelph saw her two hours after the accident, and then found this immense mass hanging

only by a small shred formed by the skin and the right commissure of the lips, and leaving exposed an enormous cavity, consisting of the mouth, fauces, the sides of the nasal fossa, the internal surface of the right eye, part of the base of the cranium, &c. Although despairing of his patient's recovery, and anticipating gangrene, hæmorrhage, or cerebral affection, M. Odelph washed the separated parts in water, and reapplied them as well as could possibly be done, keeping them in situ by strips of plaster, sutures, and a bandage, passed under the chin, to present the motion of the lower jaw. No untoward symptom presented itself; cicatrisation of the soft parts took place in ten days, and the bones were reunited in the course of two months. The patient was seen two years afterwards; she was quite well, and not much disfigured.—*Journ. de Connaiss. Med. Chir.*

AMENORRHŒA.

M. Andrieux, of Brionde, treats amenorrhœa by applying what he calls a speculum pump to the os uteri. His plan consists in applying a cupping-glass, by means of a tubulated speculum, to the inner tube of which is attached, at its external extremity, a piston; the other end embraces the neck of the womb. The instrument is made of copper, and as the inner tube cannot fit the wombs of all women, it may be unscrewed from the outer, and replaced by a larger or smaller one. M. Andrieux has used this instrument sixteen times; in twelve cases with perfect success, three, where the catamenia appeared, were afterwards lost sight of, and the sixteenth refused to have it applied a second time. She was suspected to be laboring under pulmonary tubercles. Its use has never produced any injurious consequences; but M. Andrieux recommends its effects should be watched by the eye. It ought to be used a few days before the presumed period, and care must be taken that the os uteri is lodged within the tube.—*Annales d' Obstétrique.*

FORMATION OF AN ARTIFICIAL VAGINA.

Dr. Magee narrates a singular case of malformation occurring in the person of a young lady, eighteen years of age, who was placed under his care. On visiting her, he was informed by her mother that the organs of generation were wanting, but that the breasts were fully developed. After considerable hesitation he was allowed to examine her, when he found that the mons veneris, and that part of the ossa innominata called the ossa pubis, were entirely wanting, and their place supplied by a semicartilaginous membrane similar in appearance to a cicatrix from a large deep burn or ulcer. The labia were also absent, as well as the clitoris and nymphæ; neither were there any signs of a vaginal or urethral opening. The whole space from above, where the pubes are usually found, to the anus, was one even surface, except some corrugations of the integument. The urine escaped by a constant oozing from an uneven, spongy, and vascular excrescence, situated near the umbilicus. Dr. Magee was in attendance on this young lady, in consequence of her suffering severe pains at the menstrual period, lasting about a week at a time, and which were quieted only by opium. During a paroxysm of the pain, he thought he could perceive a slight elevation of the integument over that part where the vagina should have been, and, taking into consideration that the breasts were well developed, he thought it possible that the more important internal organs were in existence, and that the pains were caused by the expulsive efforts of the uterus to free itself from the accumulated menstrual fluid.

Under this impression, and having fortified himself by another opinion, he determined to perform an operation by dissecting cautiously through that part which seemed to be elevated the day before. Having effected this for about half an inch or more, a dark substance began to ooze from the wound, of the consistence of tar, but without any offensive odor. The opening was then enlarged with a probe-pointed bistoury, both upwards and downwards, when from two to three pints of this fluid escaped, with instant relief.

The patient perfectly recovered from the operation, the opening remaining patent, and the catamenia being regular. Dr. Magee does not know whether his patient had any sexual desires.—*Lancet*, July 23, 1842.

ENLARGEMENT OF THE HEART.

Dr. Boyd, of the Marylebone Infirmary, has published a communication in the "Edinburgh Medical and Surgical Journal," containing an account of the appearances after death of several cases of enlargement of the heart, a large proportion of which bear out the statement made by Dr. Clendinning, that, as a general rule, enlargement of the heart is always accompanied with enlargement of the other organs. The heart has been found by Dr. Boyd, in the course of his necroscopic experience, to vary in weight as much as from thirty-one to three and a half ounces—an instance of the last occurring in the heart of a man forty years of age. A gardener, forty-five years of age, who died five days after admission, from pleuritis, was found to have general enlargement of the heart, with dilatation of its cavities, and slight thickening of the valves; the organ weighed 27 ounces, the right lung 26¾, the left 26½, the liver 73, and the kidneys 13¼ ounces. The brain was normal. A male, seventy-eight years of age, who labored under hydrothorax, had the heart much enlarged and cavities dilated; weight 20½ ounces; the right lung weighed 27, the left 21, the cerebrum 48, cerebellum 5¾, the liver 60½, the spleen 7, the kidneys, 12, renal capsules, 1½, pancreas 4, and stomach 8¾. In another case, where the heart weighed 21 ounces, the right lung 33¼, and the left 28¾, the liver weighed 56 ounces and the kidneys 11. The abdominal viscera were congested; the brain healthy. A man, 72 years of age, who had had a fit, described as apoplexy, a week before he was admitted, and labored under dropsy, presented a great enlargement of the heart, the organ weighing 23¾ ounces. There was a bony ring round the base of the sigmoid aortic valves. The liver weighed 55 ounces; the kidneys, which contained some small serous cysts, 11½. The mucous membrane of the stomach was enlarged and thickened, and there were evidences of an ulcer on it that had cicatrised. The organ weighed 7½ ounces. The brain presented the appearance of senile wasting, with serum on the surface, and the vessels congested. In another case, headed *Enlarged Heart; Dropsy and Bronchitis terminating with Enteritis*, besides the indications of disease pointed out by the title of the case, the pericardium was nearly filled with slightly colored fluid, and the heart enlarged;

the right auriculo-ventricular opening appeared unusually wide; all the cavities were dilated, and their parietes thickened; the right auricular appendix was filled with a firm clot of fibrine, and portions of this impacted between the musculi pectinati, in which the central softening, as described by Gulliver, had taken place; the weight of the heart was 15 ounces. The abdominal organs were enlarged, the liver and kidneys congested; the former weighed 54 ounces, the latter 15; the spleen 10½, pancreas 4½, and the stomach 6. Dr. Boyd has placed several other cases on record, tending to support the pathological rule enunciated by Dr. Clendinning.—July, 1842.

PUBERTY IN THE NEGRESS.

It is a common opinion generally admitted all over Europe, that puberty occurs earlier in hot climates than in those lying within the temperate zone. Müller says, that it is stated, that in the hot regions of Africa, the changes of puberty take place in the female sex as early as the eighth year, and during the ninth year in Persia. Young Jewesses are also said to menstruate earlier than other females in our own country. This opinion Mr. Roberton, of Manchester, has essayed to controvert, in the belief that it was no other than a vulgar error. To enable him to obtain the necessary information with respect to the negress, Mr. Roberton applied to the superintendents of the Moravian missions in Antigua and Jamaica, by whom registers of births had been kept, the registry being important in fixing the date of the first appearance of the catamenia. From these gentlemen he received the information he desired, and which confirmed him in the belief that menstruation does not commence earlier in the negress than in the white. Out of 21 cases, menstruation appeared in one at 16, in three at 15, in three at 14, in three at 13, and in two at 12; while it had not appeared in one aged 14, in two aged 13, in one aged 12, in one aged 11, one aged 10, one aged 9, and two aged 8. It is further added, that many cases of negresses, from 8 to 11 years of age, who have not yet had any menstrual secretion, might be added.—*Medical Gazette, July* 29, 1842.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.

Mr. Anthony White, the president of the Royal College of Surgeons, has announced his intention of giving an annual prize for the best essay on a medical or surgical subject. The candidates to be pupils of the school of the hospital.

APOTHECARIES' HALL.

On Tuesday last the Court of Examiners of the Society of Apothecaries made their annual report to the Court of Assistants, from which it appeared that, during the past year, 393 candidates had been examined. Of that number, 330 received certificates of their qualification to practise as apothecaries.

OBITUARIES.

At Calcutta, on the 15th of May, Dr. John Robinson, aged forty-eight.

On the 22nd of May, at Calcutta, John M'Bean, Esq., assistant-surgeon to the 50th regiment, aged twenty-six.

On the same day, at Terrikerry, by the accidental explosion of his rifle, John Parrock, Esq., M.R.C.S., aged twenty-eight.

PROMOTIONS AND APPOINTMENTS.

MILITARY.

Assistant-surgeon Dr. Cameron, to the medical charge of the 2nd troop Horse Brigade; Assistant-surgeon Dr. Clark, to do duty with the 1st battalion of Artillery at Ahmednugger; Assistant-surgeon T. Young, to do duty with the 2nd battalion of Artillery; Assistant-surgeon H. Glasse, vaccinator in the Deccan; Assistant-surgeon Dr. Jephson, civil surgeon at Broach; Assistant-surgeon W. Campbell, M.D., to the 2nd battalion of Artillery in Fort George Barracks; Assistant-surgeon J. Behan, to the left wing of the 2nd European Light Infantry at Colabah.

Assistant-surgeon W. W. Pigore, allowed one year's furlough, to proceed to sea.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, August 5, 1842.

S. T. Smyth, J. K. Slater, J. Thompson, W. Cooper, T. H. King, R. R. Storks, J. H. Barnett, J. Kitsell, E. Meek, S. H. Griffith, W. Jones.

Monday, August 8, 1842.

J. Brigham, W. Wiblin, B. Wood, J. B. Haig, G. F. Webb, W. Hoblyn, E. D. Doyle, T. P. Hoblyn, N. Naftel, T. Allen, C. Davis, J. Manning, J. D. Strang.

APOTHECARIES' HALL.

Licentiates admitted Thursday, August, 4, 1842.

S. Weston; I. J. Gillam, Oxford; R. W. Lammiman, London; J. B. Steele, Stoke Ferry, Norfolk.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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ANNIVERSARY MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

[*Held at Exeter, August 3rd and 4th*, 1842.]

The tenth anniversary of this association, was held on Wednesday and Thursday, the 3rd and 4th instant, at the Athenæum, Exeter. The meeting was attended by about 200 gentlemen from various parts of the provinces, amongst whom we noticed the following:—

Charles Hastings, M.D., Worcester; Jonathan Toogood, Bridgwater; James Crang, Timsbury; T. Shapter, M.D., Exeter; Edward P. Pridham, Exeter; Thomas Martin, Reigate; Edw. Barlow, M.D., Bath; S. Ludlow, Eastdown, Starcross; Joseph Garside, Starcross; F. Fox, M.D., Brislington House, Bristol; J. H. Fuge, Plymouth; W. Budd, M.D., Bristol; T. Cowper, Exeter; D. Daniell, M.D., Exeter; G. Wallis, M.D., Bristol; R. Hughes, Stafford; — Joslin, Bath; W. Hey, jun., Leeds; T. L. Surrage, Clifton; W. Mortimer, Clifton; H. Shaw, Exeter; J. H. James' Exeter; R. L. Pennel, M.D., Exeter; James Black' M.D., Manchester; S. C. Browne, Exeter; W. Newnham, Farnham; W. J. Wickham, Winchester; P. Miller, M.D., Exeter; J. B. Estlin, Bristol; T. Cann, Seaton; S. Wreford, Ottery St. Mary; Travers Cox, M.D., Bath; H. Boisragon, M.D., Cheltenham; R. H. Lucas, M.D., Exeter; A. Robertson, M.D., Northampton; W. Williams, Heavitree; — Battersby, M.D., Torquay; E. Yarde, Crediton; A. Atkins, Paignton; T. Land, Exeter; G. R. Trewman, Hatherleigh; John Butter, M.D., Plymouth; T. Tothill, Topsham; J. Body, Cheriton Fitzpaine; J. G. Croker, Bovey Tracey; J. Parker, Exeter; W. Collyns, Kenton; J. H. May, Exeter; H. S. May, Tiverton; W. Kettle, M. D., Tiverton; W. Empson, Clisthydon; G. Black, M.D., Exmouth; W. Woodman, Exeter; R. F. Burrough, Dartmouth; A. Kempe, Exeter; G. P. Amory, Exeter; J. Spettigue, Exmouth; R. P. Price, Lympstone; J. Billet, Taunton; J. B. Bartlett, Teignmouth; W. Gillard, Totness; T. Hunter, Budleigh Salterton; C. K. Webb, Exeter; R. Arscott, Exeter; J. Edye, Exeter; J. C. Jerrard, Honiton; J. G. Morris, Exeter; S. Devenish, Honiton; W. Caird, Exeter; Erasmus M. Miles, M.D., Heavitree; J. Forbes, M.D., London; Hennis Green, M.B., London; P. C. Delagarde, Exeter; T. F. Knighton, Dawlish; A. J. Cumming, Exeter; H. H. Elliott, M.D., Exeter; J. S. Perkins, Exeter; F. Mackenzie, Tiverton; J. Winterskall, surgeon to the Scots Greys, stationed at Exeter; W. M. Cann, Dawlish; Allan Waters, Exmouth; J. Tucker, Exeter; F. A. Cleeve, Bradninch; H. D. Kingdon, M.D., Exeter; Henry L. Cowen, Army Medical Staff; F. W. Coster, M.D., Castle Cary; J. W. Harris, Exeter; T. L. Brown, Broadclist; T. Hall, Woodbury; A. Barrett, Bath; H. L. Hogg, Topsham; J. Mogridge, Bovey Tracey; E. Hulme, Exeter; H. W. Livett, Wells; P. W. Swaine, Devonport; W. H. Merry, Broadclist; J. D. Jeffrey, Sidmouth; E. Empson, Crediton; J. Lydon, Exeter; G. G. Bompass, M.D., near Bristol; W. Briscoe, Kenton; C. Budd, M.D., North Tawton; S. Barnes, Exeter; J. C. Davey, Chulmleigh; P. F. Haley, Witheridge; B. M. Browne, Chudleigh; W. B. Carpenter, M.D., Bristol, &c. &c. &c.

A council meeting was held at eleven o'clock, at the conclusion of which was held the

FIRST GENERAL MEETING.

The retiring president, Dr. Goldie, being unavoidably absent, Dr. Boisragon, as the senior vice-president of the association then present, took the chair. He expressed his regret at the absence of their worthy president, and having passed a very high complement to that gentlemen, said he would not longer detain the meeting by his remarks, but at once resign the chair to his worthy successor. The chair was then occupied by J. H. James, Esq., of Exeter, the president for the year ensuing, being greeted at the time with the hearty congratulations of the members in attendance.

Mr. James then addressed the members in an able discourse, which was listened to with great interest, and appeared to give general satisfaction. He commenced by thanking the members for their kind reception of him, and said—

"Gentlemen,—You are come to visit a region which, from its peninsular situation, appears in striking contrast with those portions of the kingdom which are perpetually exhibiting in full form the hurry and agitation, the whirlpools and eddies, of the busiest nation which ever existed. Peacefully following the happy labors of agriculture, we inhabit our glens and our valleys, we follow the course of our streams, we pursue our paths on the hill side, little affected by those ebbs and flows of commerce, which alternately spread profusion over other parts of the land, or leave them a wasted and melancholy scene, till another tide brings its alternate succession of magnificence and plenty. In the bosom of this beautiful country the members of the medical profession partake of its quiet and peaceful character; and the only anxieties and agitations we know are those which belong to a course of duties, which has for its object to alleviate the cares and troubles of all mankind beside.

We welcome you to a district which has no mean beauties to boast of—to shores often and deservedly celebrated—to a city which, if it cannot exhibit the stately buildings which the wealth of commerce has raised in the princely towns of the north, has still some claims to notice, from its happy position in one of the fairest valleys of the land, selected as it was by an ancient people equally renowned for their judgment and their taste. We welcome you to a place not un-

known in history—a place which, to say nothing of more ancient events, successfully stemmed the tide of rebellion in Henry the Seventh's reign, and was amply rewarded for its conduct by that able monarch—which afforded a secure place of refuge, in time of need, to the queen of our hapless Charles—and was among the first to welcome that prince, whose firm and sagacious mind laid the foundation of the tempered and rational liberty which has blessed this country, beyond all others, for more than a century and a half.

It may be asked, whether this district has contributed aught to the advancement of medical science?—whether the pictures of any great men adorn our walls—of men who, in times past, have benefited this region by their labors? Gentlemen, there are such, and we may be justly proud of them. Dr. Glass was such a man; Mr. Sheldon was such a man; and if my friends in another part of the country will allow me to strengthen the list from the worthies they have produced, I will add the name of Huxham, who may justly be ranked among the foremost men of this kingdom. To the dead we are precluded from applying aught but praise—to the living we are denied it—or, at least, if it be at all permitted, the language must be moderate and subdued; were it otherwise, I should, in adding another name, eagerly embrace the opportunity of bestowing on it the full meed of praise, but the immediate presence of the distinguished physician who bears it, precludes me from saying more, than that his works bear ample and acknowledged testimony to a high degree of sagacity and a powerful judgment.

Gentlemen, you are come to visit us at a period when most important changes in the constitution of our profession are contemplated. It has been ever one of the first objects of this Association to support its honor and to maintain its interests. The founder's high and disinterested character, as well as the names of those who have been from the first associated with him, are a guarantee that every thing will be done in honor and good faith; and although we may not and do not all agree in our opinions on some subjects, we may be sure that the object of all is to uphold the respectability of the profession as well as the welfare of our fellow men.

Among the reports of the various committees which will be laid before you, on this, as on former occasions, that on the subject of medical reform, will doubtless command the most interest, and at this particular juncture, when the attention of the whole profession has been called to it, it probably will be expected of me that I should not pass it over altogether in silence. That the state of the medical profession is in many respects exceedingly anomalous, is not the mere assertion of ardent and visionary men, but a truth recognised by many of its leading members, and accepted by the legislature itself. So deeply, indeed, is this impressed upon the opinion of her Majesty's government, that one of the principal ministers of the crown has signified his intention of bringing a bill into Parliament for our future regulation.

It must be confessed that the perpetual fluctuations in the schemes of medical education, varied according to the opinions of numerous bodies under no external control, has been one acknowledged source of evil, and by no means a small one. It may be difficult, however, to determine exactly what this shall be in future, for if, on the one hand, the minimum qualification is pitched too high, no legislative power, if exerted, will, I believe, ever prevent the intrusion of irregular practice to a large extent; if too low, the character of the profession, now fast rising in public opinion, will be damaged, and the public itself in that way injured. When the scheme can be so adjusted as to meet the differences which situation and various circumstances demand, an end should be put to frequent, I had almost said constant, changes.

Another subject which deeply concerns the profession, is that of irregular practice. If it be true that Government does not intend to interfere directly with this—if even the remedies which the law now affords are to be abandoned—there is great reason to apprehend that the interests of a large number of its members will be injured. That, however, is not the principal question. Our self-interest must be sacrificed, if the public welfare *justly* demands it; but it may be greatly doubted whether those who contend that the world is to be trusted to their own guidance in such a case, are right. It never has been asserted, it hardly can be, that the people of this realm should not be protected from those who would impose on them unsound food or adulterated drugs; upon similar principles it would follow, that those should be restrained, who, without a presumption of competency in their favor, undertake the cure of serious diseases. Legislative interference should not be carried too far; but if we actually demand that interference in one way—if we truly say that every practitioner of medicine ought to receive a competent education—is it consistent in the same breath to state, that it may be carried on with impunity by those who have none? Any conclusion relative to this subject, drawn from analogy as regards other points of public polity, however relied on, must fail. The question is sui generis. No ability—no industry—will suffice to enable men to treat diseases safely, if the first element of medical knowledge—that of the structure of the human body—be wanting. In advancing this, I do not look at the question so much as one regarding the profession, as the public. Time would correct the evil as respects the former, by diminishing the number of its members; but no time will remedy the objection as applied to the community at large.

There is one point connected with the subject of medical reform to which I feel it peculiarly *my* duty to advert. When I had the honour of addressing you, on a former occasion, and in a different position,* I took the liberty of expressing my deep regret that the provinces were excluded from all influence in regulating the proceedings relative to the profession; for it is in the nature of things impossible, that gentlemen living in the metropolis—spending their whole lives there—can possess sufficient knowledge of the exact state of medical affairs in the country districts, differing widely in many respects from those of the great city they inhabit, to enable them adequately to do so. Many facts confirm this view. The schemes of education, which have from time to time emanated from the ruling bodies, strongly bear the imprint of it. They

* In the Retrospective Address on Surgery, delivered at Liverpool, 1839.

have been in nowise solicitous to make the most of those means of instruction which the provinces afford; and they have been wholly regardless of the importance of giving to parents, who reside there, the opportunity of retaining their children under their own roofs, or of placing them for instruction during their immature years in situations more favorable to moral superintendance than can be obtained in the midst of a crowded metropolis. It is to be hoped that, whatever regulations may be made in future, due care will be taken that our claims to attention on this point will neither be unheard or unheeded. I am not the advocate of a system which sacrificed the last years of a man's life to mere drudgery; but if it be granted that more knowledge may be obtained by youths of an early age in the metropolis (though, with reference to practice, this may be doubted), that knowledge may still be purchased too dearly.

Few questions which have ever presented themselves to the consideration of the legislature have been attended with greater difficulties than that of medical reform. Yet it is a question which, if rightly disposed of, may, to use the emphatic language of Sir James Clark, "confer a benefit on the country which will continue to be felt, when many of the measures which are at this moment exciting so much interest, and attracting so large a share of public attention, will cease to be remembered." Yet, Gentlemen, it is a question which is, as I have stated, beset with difficulties. Precedents, on which the legislature so much relies, are wanting. It is everywhere asked, whether due care has been taken that the information necessary to determine its deliberations has been sought for and obtained from all the sources which are likely to bring the different bearings of the case into full view. If it has not, the structure raised on too narrow a base may fall—a fabric hastily put together may be too faulty to endure. It would be better to have no change than an ill considered one; and I willingly express my opinion as so far concurring with that of the president of the southern branch of the asociation,* "that there is more to be feared from premature and crude legislation than from delay; human affairs," as he justly observes, "if unfettered and left to themselves, have, for the most part, a tendency to fall into a proper course." I should further say, Gentlemen, that reform will not be *just*, unless the claims and interests of the present race of practitioners are fully attended to—not *wise*, unless ample provision is made for future improvement—not *fair to the community*, unless the welfare of all be consulted.

There will be no indisposition on the part of the legislature, I am fully warranted in saying, if I may draw any conclusion as to the whole, from the communications I have received from the members of the county and city on the subject, when I forwarded to them the memorial of this Association (and I may venture to say of them, that few counties and few cities can boast of men of higher stamp than they are). There will be no want of inclination to consider these questions attentively, or to deal justly in the matter. The doubt is, I must repeat, how far the legislature is informed of its numerous and complicated bearings. None of its acts have hitherto, I conceive, evinced sufficient knowledge of medical topics. We shall hardly find it in the regulations enacted or proposed as regards lunatics—in some of the clauses of the Coroner's Act—in the imperfect working of the Anatomy Act—nor in a case still more relevant to the present question, the Apothecaries' Act of 1815, which conferred an unreasonable degree of power on a body, which, it would be but common justice to say, has exercised it with advantage, and which, if it had set the example of throwing aside its trading character, would have greatly deserved our respect.

I trust that I am not exceeding the limits of prudence, in pursuing this subject. I have every wish that the respective classes of the profession should be upheld in their just privileges, and, as regards the great chartered bodies which have been so much condemned, I must express my opinion, that the highly distinguished individuals of which they consist have probably discharged those duties, which they apprehended were imposed upon them, more faithfully than is commonly believed. They have erred from the circumstances in which they have been placed. Their position is peculiar. They arose, one after the other, out of a kind of chaos, to fulfil purposes which they have in truth answered to a considerable degree; but they are themselves convinced, I believe, that some change is requisite.

Gentlemen, if called upon to state my own opinions, I should adopt the sentiments I expressed in a letter, which I had occasion to address to the general council, agreeing with them on the necessity of having the primary license to practise, laid down upon a general standard, in every part of the empire. I then should with great deference submit, that it might be advantageous to make an arrangement by which, as in our great universities, those candidates who are admitted might be classed according to their proficiency. By this the character of the profession would be raised, from the emulation so natural in early life, and the most promising fields of practice would be opened to those who distinguished themselves. At the same time, the standard would with safety admit persons, whose services might still be obtained by the less opulent classes of society.

The examinations, I conceive, should be essentially practical; it is the only test of real qualification. Otherwise, the acquired panoply of the candidate may be no more substantial than the pasteboard armour of Don Quixote; whereas, if all is solid and sufficient, it matters not whether he has been "Thebis nutritus an Argis"—whether his alma mater has been metropolitan—or whether he has been nursed in the country.

The important question remains—into whose hands the government of the profession ought to be consigned? If to the Colleges of Physicians and Surgeons only, the great and deserving body of general practitioners will apparently be unjustly excluded from any influence in making those regulations by which it is to be guided, and which, to a certain extent, it has hitherto possessed. On the other hand, if they were to be admitted numerically to any convocation of the medical faculty, they would surely swamp the first class of the profession, whether physicians or surgeons, whose high and honorable conduct has so long and so well upheld its reputation in this country. To me it appears, that, without reducing all things to an im-

* Dr. Salter.

possible level, the train could be so adjusted, that each order might possess its own share of influence, none be deprived of it altogether. These questions demand calmness, prudence, and forbearance in their discussion. The good sense—the good feeling of my professional brethren—will, I am convinced, lead them to entertain them in a just and conciliatory spirit; and this, the parent stock of the medical associations of provincial England, will not be wanting in dealing with them in a manner which becomes so weighty, and at the same time so difficult, a subject.

Gentlemen, I am aware that I have somewhat departed from the usual course pursued by the presidents of this Association, in having gone pretty fully into one of the subjects selected for your consideration. But, in the first place, at a juncture such as this, I did not think it right that my own sentiments should be misunderstood; and, in the second place, I observe that at almost every branch meeting, the presidents of those branches have thought it right, more or less fully, to word their opinions. I will now detain you no longer, but trust you will forgive me if I have erred in occupying so much of your time. I can only, in addition, express my hope, that the proceedings of the society at this anniversary will be conducted with as much kind temper as any which has preceded it, that the instructive communications and valuable reports which will be laid before you will be received with the attention they deserve, and that the common object of every member will be attained, that of raising the character of the profession in general estimation.

At the conclusion of his address, Mr. James called on Dr. Hastings, who read the following

REPORT OF THE COUNCIL.

Your council congratulate the members of the Association on assembling together to celebrate the tenth anniversary, for they consider that never since the establishment of the society were the prospects of its continued and increasing prosperity more bright and encouraging than at the present time.

TRANSACTIONS.

The society has, since the last meeting, published the tenth volume of Transactions, and a copy of it has been supplied to every member not in arrear. This work well sustains the original character of the Association, as the contributions to it relate chiefly to those subjects for the investigation of which the society was instituted. The continuation of Mr. Ceely's experiments on vaccinæ and variolæ, and the engravings from the beautiful drawings by which they are illustrated, afford ample testimony to the liberality with which such inquiries are encouraged by the society; and must lead the members to consider that the money subscribed by them is well bestowed in forwarding such pursuits, and in being the means of diffusing so much valuable information. But not only have the members enjoyed as heretofore the advantage of receiving a copy of the Transactions; they have likewise, without any call for an increase of the annual subscription, had a periodical supplied weekly to them. For this great benefit the members are in a considerable degree indebted to the editors of the "Provincial Medical Journal," who, actuated by the most liberal views towards the Association, have enabled the council to purchase, at a reduced price, the number of copies necessary for the members of the Association, who thus, for the small annual subscription of one guinea, have supplied to them an annual volume of Transactions and a weekly medical periodical. These great benefits should induce members cheerfully to pay their subscriptions; and indeed it becomes more than ever important that there should be no arrears, for it is impossible that the great expenditure now incurred can be maintained unless the income is regularly paid to the treasurers.

FINANCES.

The expenditure, during the year that has passed, amounts to a larger sum than in any former similar period. The different items are given in the accompanying statement of accounts, from which it will be seen that the expenses of the poor-law committee are to a large amount; but it should be remarked that these extend over a period of three years; and that, notwithstanding these and other heavy payments which appear in the accounts, there is yet a balance to carry to the next year's receipts. The gross income and expenditure are as follow:—

	£	s.	d.
Income, including the balance of £582 1s. from last year .	1721	1	0
Expenditure	1185	11	0
Balance	£535	10	0

MEMBERS.

The number of members is greater than it was at the time of the last anniversary, the number now on the list being thirteen hundred and fifty. There is every reason to expect that the list of members will receive still further additions, as the advantages which now accrue from membership are so considerable as surely must induce those who take an interest in the advancement of medical science to join an Association which, for a small annual contribution, affords them, by means of its Transactions and weekly Journal, so bountiful a return of professional information.

Your council also may be permitted to observe that, considering the very liberal manner in which the editors of the Journal have placed that work in the hands of the members, it is not too much to expect that the latter will lend such literary and other assistance as may be in their power, to support so praiseworthy an undertaking.

EMPIRICISM.

The views of the Association having been fully expressed on former occasions, no special report on empiricism will now be presented.

MEDICAL REFORM.

During the past year the subject of medical reform has continued to be discussed by the profession, and your council have endeavoured to give an unbiassed consideration to several propositions that have been submitted to them. They have, however, thought they should best discharge the duties intrusted to them by adhering, as strictly as circumstances would permit, to the principles which have been recognised at the several anniversary meetings when this question has been discussed; and it may be as well to remind this meeting, that at the last anniversary a memorial was agreed to and directed to be forwarded to the Government, in which the Association forcibly points out

many of the evils that have resulted to the public and to the profession from the want of a suitable legal organisation, which, they maintain, can only be obtained by the intervention of the legislature; and they consequently desire that a well-formed bill be submitted to Parliament; but they go on to observe, that much importance attaches to the source from which such a bill should emanate. Speculative reformists, from a too ardent zeal to realise speedily all their conceptions, would be liable to seek too much. Existing institutions, on the contrary, if intrusted with the framing of a bill, would concede too little. In this emergency, it is most desirable that any bill for reforming the medical profession, for calling forth its full energies, and adapting it to the necessities of all classes of the community, should issue from those who would be untrammelled by either extreme party—namely, the ministers of the crown.

It is highly gratifying to find that the course recommended in the above memorial has been adopted by her Majesty's government. Early in the present session of Parliament, the Secretary of State for the Home Department announced that a bill for amending the polity of the medical profession was in a forward state, and he was not without hope that he might be able to submit it to the House of Commons before the prorogation of Parliament. This announcement was, as might be expected, received by the profession with every mark of satisfaction, and much speculation was immediately called forth as to the nature of the provisions of the proposed bill. Your council could not fail to see that an important crisis had now arrived, as upon the nature of the proposed bill the future destiny of the profession in a measure depended; and they therefore, after having met several times and considered the question, thought it right to address Sir James Graham, and to inform him what the principles were that have been maintained at the successive anniversary meetings of this numerous and influential Association. They therefore, on the 5th of March, unanimously resolved to send the following memorial to the Right Honorable the Secretary of State:—

"We, the undersigned members of the council of the Provincial Medical and Surgical Association, respectfully beg leave to offer you our thanks for the declaration made by yourself in the Commons' House of Parliament, that her Majesty's Government are about to bring a bill into Parliament for the better regulation of the medical profession.

That this duty might be undertaken by her Majesty's Government was the hope expressed by the very numerous body whom we have now the honor to represent, at their late anniversary meeting holden at York, in the month of July last; and it will perhaps be in your recollection that a memorial to that effect, having been adopted at the meeting, was subsequently laid before you.

To the principles expressed in that memorial we take the liberty of again drawing the attention of yourself and your right honorable colleagues, embodying as they do the sentiments and wishes of a very large and influential portion of that profession for the welfare and protection of which you have been pleased to signify your intention to provide.

The evils complained of by the members of the medical profession, in the redress of which it should be observed the general community as well as the medical profession are deeply interested, are the imperfections and unequal character of the existing methods of qualification for medical licenses and degrees, and the inefficiency and exclusiveness of the existing medical corporations, together with their want of power to afford protection to the public and to the medical profession against the arts of unqualified and ignorant pretenders.

In applying to her Majesty's Government for redress of these evils, we are desirous neither of injuring existing institutions nor of abrogating those distinctions in the profession which we believe to be useful to the public service; but we feel that we should be guilty of a dereliction of duty if we did not express respectfully, but firmly, that unless the present medical corporations shall undergo extensive changes in their constitution they can never become fitted for the government of the profession at large, seeing that they have not hitherto secured the confidence of its members.

We beg leave to express our opinion that the members of the medical profession, not only in consideration of the character of their education, but in accordance with the general institutions of the country, are entitled to elect the medical members of the councils, or of the corporations to which they severally belong; and that any measure which shall fail in securing to them such a privilege will be felt as the denial of a right to which they think they have a just claim.

The principles to which we are desirous of calling your attention, as being those recognised by the Provincial Association, and upon which, as we conceive, any measure intended for the regulation of the medical profession should be founded, are *uniformity of the primary qualification*, to be tested by sufficient examination; *equal right*, in every member of the profession, to practise throughout her Majesty's dominions; and *the adoption of the representative system* in the formation of the councils or governing bodies.

In submitting these views, we are assured that we express the wishes not only of the numerous Association with which we are ourselves connected, but also those of a very large number of our professional brethren throughout the country."

The receipt of this memorial was politely acknowledged by Sir James Graham, but his letter contained no information as to the nature of the bill which it was understood the government was intending without much delay to introduce into the House of Commons. It therefore became a question whether it would not be desirable still further to urge upon the attention of the Government the principles of medical reform which had been adopted by this Association; and as several letters were written to the council, pointing out that some good result might arise from a deputation of members being appointed to have a personal interview with the Home Secretary, the council met again on the 26th of March, and unanimously resolved, "That it appears expedient to this council that a deputation, consisting of six members of the Association, should seek an interview with the Right Honorable Sir James Graham, and explain to him the views which are entertained by this Association on the subject of

medical reform, and request his attentive consideration of the same."

The deputation, however, did not go up to London, for within a short space of time after the above meeting, it became generally known, by a communication from the Secretary of State to Dr. Webster, that it was very doubtful whether the state of public business would permit the Government to legislate on medical affairs during this session of Parliament. This being the case, it appeared to the council far better than the deputation should directly emanate from the anniversary meeting, as thereby the whole weight and influence of the Association would be brought more immediately to bear on the question. It may be right to mention further that, on a notice being given by the Right Honorable Secretary of State that he contemplated introducing a bill into Parliament to empower her Majesty to grant charters to the Colleges of Physicians and Surgeons, the council thought it right to petition both Houses that they would not entertain any measure of partial medical legislation until the whole subject of medical reform was brought before them. It remains, therefore, for the members present to decide upon the course now to be pursued, in which they will doubtless be assisted by the reform committee, who have given due consideration to the information which has been more lately communicated upon this question, and who are prepared with a report to be read at this meeting.

POOR-LAW MEDICAL RELIEF.

It has been the aim of the Association, ever since the year 1836, to obtain some legislative enactment for the better regulation of medical relief for the poor. To this object the attention of the council has been specially directed during the past year.

The publication of the reports of your poor-law committee, and their extensive circulation among members of Parliament and other influential persons, although involving the Association in considerable expense, were deemed essential preliminaries to any parliamentary discussion on the question.

In accordance with the advice of Mr. Serjeant Talfourd, your council communicated in January last with Sir Robert Peel and Sir James Graham, and requested their consideration of the principal statements and suggestions of your poor-law committee.

The distinguishing features of the several plans proposed by that committee were laid before her Majesty's ministers, who expressed their thanks for the information thus afforded, and promised particular attention to the subject, but declined pledging themselves to any parliamentary measure.

Anxious to obtain the assistance of all who might be endeavouring to promote an equitable settlement of this question, your council requested the co-operation of the president and council of the London College of Surgeons. The secretary of that body stated, in reply, that the president had conferred with the commissioners, and hoped to effect an amendment of the system. The college, therefore, declined to assist in bringing the subject before Government and Parliament, and recommended the Association to refrain from further proceedings until after the publication of the alterations then about to be made by the poor-law commissioners, which the college believed would "be found to redress nearly the whole of the grievances of which the medical officers of unions have complained."

Shortly after the propositions of this Association had been submitted to the Government, the poor-law commissioners published and circulated their new medical regulations, obviously the result of the long-continued efforts of the medical profession. The advantages and defects of these regulations have been considered in the late special report of your poor-law committee, which was adopted by your council, and is now in the possession of every member of the Association.

Acting on the suggestions contained in that report, your council again memorialised the Secretary of State, soliciting him to introduce such provisions into the Poor-law Amendment Bill as might remove the remaining imperfections of the medical arrangements. This application has been politely acknowledged; and from an important communication very recently made to your council, they have reason to believe that the appeals of this Association, together with the personal exertions of the late president of the London College of Surgeons, have induced the Secretary of State to accede to the augmentation of the salaries of union medical officers.

In the absence of definite information respecting the intentions of Government it would be obviously premature to pronounce an opinion on the expected improvements; but your council feel persuaded that there can be no adequate security for an efficient and satisfactory administration of this department of the public service until it be placed, partially at least, under the superintendence and direction of medical authorities.

The attainment of this object, therefore, in connection with other legislative provisions for the public health, demand the continued and vigilant attention of the Association; meanwhile, your council congratulate the members upon what has been effected, and hope that the wide diffusion of correct views and right principles which they have been instrumental in promoting, may in the end produce further results, alike advantageous to the members of our profession, and gratifying to every humane and philanthropic mind.

BENEVOLENT FUND.

The council regret to say that the benevolent fund has not yet been enabled to resume its operations in conformity with the resolutions passed by the Association at Southampton in 1840; great exertions have, however, been made during the past year, and the central committee confidently anticipate that in a short time they will again be able to fulfil the benevolent intentions of the donors and subscribers to the fund. A more detailed account of the state of the fund will be given in the report, to be presented to the meeting by the central committee.

CONGRATULATORY ADDRESSES TO THE QUEEN, &c.

Since the last anniversary the birth of H.R.H. the Prince of Wales has occurred, and this auspicious event could not fail to call forth from the medical profession, as well as from all classes of her Majesty's subjects, the most lively expressions of joy and gratitude; and your council felt that the occasion demanded that the Association should testify in an appropriate manner the participation of the members

in the general rejoicing. Congratulatory addresses have accordingly been presented to her Majesty, and to H R.H. Prince Albert.

DISTRICT BRANCHES.

Your council have to report the formation of three district branches: one at Hull, called the East York District Branch; another at York, called the Yorkshire District Branch; and a third at Exeter, entitled the South Western District Branch. The rules by which these branches are governed are similar to those of the branches which were before in existence. It is also right to observe, that the Bath and Bristol branches are united into one branch, which is now the Bath and Bristol District Branch.

CONCLUSION.

Your council are deeply solicitous for the progressive advancement of the Association—a result which can only be insured by the united endeavours of the members to promote the objects for which we associate—namely, the increase of medical knowledge, and the maintenance of the honour and respectability of the profession generally in the provinces, by promoting friendly intercourse and free communication of its members, and by establishing among us the harmony and good feeling which ought to characterise a liberal profession.

It cannot be denied that the prosecution of such objects must be beneficial, and exert a salutary influence in obtaining for our noble profession that proud position in public estimation which, as a class, we are entitled to occupy. Indeed, the successful prosecution of these objects will do more for us than any legislative enactments can effect, for it will bind us together by the ties of mutual regard and kindness, and will enable us, under all vicissitudes of life, to cherish the consoling reflection that we have unremittingly endeavoured to render the art of medicine more perfect, and consequently ourselves more instrumental in administering relief to the sickness and sorrow of our fellow-men."

The Doctor was repeatedly cheered during the reading of the report; after which Dr. Miller, of Exeter, moved, and Mr. Barnes, of the same place, seconded, "That the report of the council, now read, be adopted and printed," which was passed unanimously.

Mr. Soden, of Bath, inquired the amount of money received by the secretary in the shape of subscriptions, and being informed that it amounted to a little more than £1,000, said that it appeared to him that there must be a large amount of arrears upon the books. If the society now numbered 1,400 members, its income ought to exceed the sum which had been given by the worthy secretary.

A conversation ensued, in which it was declared that a large amount of arrears did appear upon the books of the Association, and that it was not correct on the part of members, who neglected to pay their subscriptions, when they were receiving not only the annual volume of "Transactions," but also the weekly Journal of the Association, amounting in value to nearly double the sum required annually from them. After further discussion, Mr. Soden concluded by giving the following notice of motion for the next year:—"That the names of the members whose subscriptions are two years in arrear be printed as a separate supplementary list." (Cheers.)

Mr. Rumsey, of Gloucester, proposed to make the following addition after the sixteenth rule of the society—viz., "That members of district branches be allowed the option of paying either the annual guinea with other members of the Association, or a third part of the guinea annually, without being entitled to receive a copy of the 'Transactions' or of the 'Provincial Medical Journal.'"

It was not supported by any member, and consequently fell to the ground.

Dr. Hastings then read to the meeting a letter from Dr. Branson, of Cambridge, putting it to the consideration of the members whether a publishing society could not be formed upon a similar principle to one now in existence, and supported by the clergy. A great many works of the old authors were well worthy of being republished, but this could only be done by a society of the above character.

Dr. Barlow said the proposal had undergone the consideration of the council, and there was a great deal in it to admire. The only difficulty was, as to how the proposition could be carried out; it could not be carried into effect without a great number of contributors. In the society which had been instanced, he believed there were upwards of 5,000 members; but where they would find that number of professional contributors he could not tell, and more especially after reading the proposition which had been placed upon record by Mr. Rumsey. He was gratified with the tone and spirit of Dr. Branson's letter, and, for one, should be glad to see it carried into effect. He did not think the Association could adopt the letter, and, therefore, he would move "That this meeting offer their thanks to Dr. Branson for his suggestion relative to a medical publishing society, and the members would be happy to find that such a society could be supported by the profession."

Dr. Wallis, of Bristol, was persuaded of the good that would result if a society of the description mentioned could be carried into effect. He should be glad to see more of the sterling good resting upon th shelves of our various libraries published, instead of the various works of novelty which are now daily issuing from the press—good which, he was certain, would often be found instructing and interesting to the seniors as well as to the juniors of the profession. He would be glad to see the society in existence, but was afraid such an one could not succeed. He sat down by seconding the resolution.

Mr. Martin, of Reigate, considered it a most desirable proposition, and suggested that perhaps a committee could be formed to receive subscriptions, and hoped they would not lose sight of the proposition.

Dr. Boisragon, of Cheltenham, said there was not so great a lack of old books as appeared to be imagined by members present. Sydenham had been mentioned several times during the debate, and he was confident that, if required, he could procure 150 copies of "Swan's Sydenham," at the rate of four shillings each, and other works, termed the Medical Classics, at equally cheap rates.

Dr. Forbes, of London, said that the proposition laid down by Dr. Branson was not new. Some years

ago he had seen a prospectus containing a proposal of this kind, and a proposition had also been made by two of their own associates—viz., Messrs. Joseph and William Buller, of Southampton—but it had not been carried into effect.

The motion was then put and carried unanimously.

The Chairman next drew the attention of the meeting to the following resolutions of the Shropshire and North Wales District Branch Association, and desired the opinions of the members upon the question, when a very animated discussion ensued.

It being the opinion of the members of the Shropshire and North Wales District Branch of the Provincial Medical and Surgical Association, that no inquiries of insurance companies should be answered unless accompanied by a fee of £1 1s.,—Resolved, "That, in order to secure unanimity among the members of the medical profession, the subject be referred to the general meeting of the Association at Exeter."

After some remarks from Mr. Gillard, of Totness,

Mr. Wickham, of Winchester, said that the same question had been entertained by the Southern District Branch of the Association, and they wished it made known that their opinion was that the profession should be remunerated. They were called upon to give certificates, for which they were held responsible even in a court of justice. As the offices called upon the profession so peremptorily to give the certificate, the profession ought to call upon the offices to pay, the more especially as the offices derived all the benefit. If the certificate were not good, the office refused to effect the assurance.

Mr. Newnham, of Farnham, considered the question which they were discussing a very delicate one. He was an appointed referee for thirteen or fourteen offices; his charges were not uniform, and, from his experience, he could not see a method by which they could be made so. In certain cases the patient must pay, and in others payment was out of the question.

Dr. Robertson, of Northampton, expressed a similar view of the subject, and proposed a resolution deprecating the entertainment of the question.

Dr. Forbes (after a desultory conversation) said, he was sorry this motion had been put, lest by any chance it should be carried in the contrary way. If this should be so it would be in his opinion the severest blow which could be given to the honor and dignity of the profession. He thought the way in which they ought to deal with the matter was demonstratively clear. The man who insured did so with the view of benefiting himself, and the insurance company had a right to prescribe what conditions they thought fit. One of these conditions was the production of a medical certificate, and if the party making the application failed to produce it, the bargain was off at once. Now if a person who was about to ensure went to a medical man to whom he was very little known, who had perhaps lost sight of him for three or four years, and gave him a great deal of trouble in making the necessary inquiries, he would no doubt be entitled to and justified in taking, a fee. But if the party applying was an old patient, a man whom he was in the habit of seeing every week and perhaps every day, and who merely asked him to state what he knew of his constitution, he should be horrified at the bear idea of taking a fee under circumstances such as these. (Cheers.)

Here the subject dropped, Dr. Robertson having withdrawn his motion.

Dr. Robertson, in a brief speech, referred to the pleasure experienced by the members in their visit to York at the last anniversary, and regretted that their respected retiring president was not present to receive their congratulations for the services he had rendered the Association during the past year. He concluded by moving the following resolution:—"That the thanks of the meeting be given to Dr. Goldie, the retiring president, and that he be appointed a vice-president of the Association." (Cheers.)

Dr. Forbes seconded the resolution, which was passed with marked approbation.

Mr. Soden said that a most pleasing duty had fallen to his lot. He had heard, reluctantly, that their esteemed secretary, Dr. Hastings, intended to retire from the office which he had held so long and so satisfactorily. (Cheers.) He could say it without hesitation to all the members, in filling up the other offices of the Association there could be no difficulty; but where they were to turn for another secretary he was at a loss to know, as he was sure, also, every other member of their society. That the duties of the Association were very heavy, no one could deny; and no one he knew was more anxious to fulfil those duties than their friend, Dr. Hastings. By the constitution of the rules of the Association, they could not at the present release him, and he hoped that they never should lose him from taking the active management which he had hitherto done in their affairs. The only method which suggested itself to him was, the alteration of the seventh rule of the society, by which it was now rendered imperative upon the secretaries to reside in Worcester. He stated his intention to give a notice upon the subject for the next annual meeting; and having further expressed the great obligation the members were under to Dr. Hastings, he concluded by moving the following resolution:—"That the thanks of the meeting be given to the secretaries of the Association, Dr. Hastings and Mr. Sheppard." (Much cheering.)

Mr. Toogood concurred in all that had been said by Mr. Soden, and that the members could never sufficiently appreciate or be too grateful for the eminent services rendered by Dr. Hastings, and, therefore, most cordially seconded the resolution. (Great cheering.)

Dr. Hastings replied with much feeling. He assured the members of the Association that he felt deeply indebted to them for all their past as well as their present kindness. He felt that the time he had passed in connection with this society had been one of unmingled gratification. He could truly say that there was no one occasion on which he had attended these anniversaries that he had not gone back filled with gratitude for the unceasing kindness he experienced, and pleasure at the increased knowledge he had derived from what he had heard and seen on these occasions. (Cheers). It was matter of the sincerest gratulation with him that he had been one of the first who took an interest in this society, and who thought that such an Association as that which had now become so prominent, and of so much importance, should be formed in the provinces. He, of course, under these circumstances, felt deeply grieved in the

contemplation that the time should ever arrive when less able and active than he was at present—he should be separated from those duties which were so acceptable to his feelings and his habits. (Hear, hear.) But the days of activity of man were comparatively few. He had already been five and twenty years in active practice in his profession, and he had already been actively engaged during a period of ten years in carrying on the duties of this society—he need not tell them that its duties were very heavy, and required constant and diligent care. (Hear, hear.) The time would come when he would be no longer equal to those active duties, and he must either neglect his professional duties, or those of the office—for as he said before, although he had been equal to the task he might not be much longer so—and it was his hope that this society should be one not for the present day merely, but that it should go on to distant ages—that they might not only see it carried on with activity and zeal during their time, but that provision should be made, that after they had quitted the scene and another generation had arisen, this society should still flourish and carry down to the distant, far distant future, the zeal and energy, the honor and renown, of this present time. (Applause.) Under these circumstances it became imperative that he should, at no distant day, relinquish his office, and the duty of filling it up would then devolve upon them. He requested most earnestly that measures might be adopted which would prevent the society from suffering from that which must happen—the relinquishment of those duties which now devolved upon him. He was sure that the day, come when it would, would be one of great sorrow to him—because, as he had said before, if in the course of his life he had received gratification from any one act, it was from having been amongst the first who associated for this great object—an Association which was, unquestionably, the first in this kingdom, and which had gone far beyond what he or any of them could have calculated upon. (Cheers.) After a few other observations, the learned doctor sat down amidst warm and general plaudits.

Mr. Soden then gave the following notice of motion for next year:—"At the next annual meeting I intend to propose that the law limiting the number of secretaries to two be altered—that the word *two* be omitted, and that the number of secretaries may be unlimited."

Dr. Hennis Green, of London, then moved "That the thanks of the meeting be given to the council for the past year, and that they be requested to continue their services with the following additional members, and that they be empowered to add to their number—

Patrick Miller, M.D., Exeter; Thomas Davies, M.D., Chester; R. Martland, M.D., Blackburn; E. G. Bruncker, M.D., Dundalk; T. W. Coster, M.D., Castle Carey; R. D. Thorpe, M.D., Leeds; R. S. Hopper, M.D., Leeds; Samuel Smith, Esq., Leeds; J. P. Garlick, Esq., Leeds; William Hey, jun., Esq., Leeds; John Yonge, M.D., Plymouth; William Collyns, Esq., Kenton; Richard Lewin Pennell, M.D., Exeter; John H. Fuge, Esq., Plymouth; Edward Pridham, Esq., Exeter; Thomas S. Hodge, Esq., Sidmouth; R. Pullan, Esq., Hamlet, near Leeds; Charles Chadwick, M.D., ditto; William Price, Esq., ditto; William Braithwaite, Esq., ditto; Thomas Nunneley, Esq., ditto; T. P. Teale, Esq., ditto; G. Taylor, M.D., Maidstone; — Sibbald, M.D., Maidstone; Thomas Hitchings, Esq., Maidstone; Thomas Hunter, Esq., Budleigh Salterton; William Trevor, Esq., Dulverton; William Haynes Maunder, Esq., Cullompton; William Gillard, Esq, Totness; Samuel Barnes, Esq., Exeter; Alfred Hardwick, M.D., Kensington; — Darrant, M.D., Ipswich; C. K. Bree, Esq., Stowmarket; S. Burman, Esq., Wisbeach; Thomas Cammack, M.D., Spalding."

Mr. Crang, of Tiverton, seconded the resolution, which was unanimously adopted.

Dr. Barlow then read the

REPORT OF THE REFORM COMMITTEE.

In the present report your committee have but few remarks to offer on the important subject of medical reform, so fully have the proceedings of the Association in respect of it, through the agency of the general council within the past year, been recorded in the general council's report already laid before you. The committee, however, cannot refrain from congratulating the Association on the decided advance which the reform cause has made within the year. In accordance with the memorial addressed last year by the Provincial Association to her Majesty's principal Secretary of State for the Home Department, it was announced in Parliament that a bill for the general regulation of the profession would be speedily introduced, with the sanction of her Majesty's ministers, and prepared by the Right Honorable the Home Secretary. Anxious to impress on the framer of the bill the principles of reform by which such bill, to be at all adequate or effectual, should be characterised, and which its provisions should display, the general council deemed it advisable to transmit to the Right Honorable the Home Secretary a further memorial enforcing these principles, and explicitly stating them to be "uniformity of the primary qualification tested by sufficient examination; equal right to every member to practise throughout her Majesty's dominions; and the adoption of the representative system in the formation of the councils or governing bodies."

So far the council have ably and diligently discharged the duty devolving on them, leaving nothing to your committee to suggest in addition to what the council had so judiciously determined.

The results of these several procedures your committee have closely watched, and they have anxiously awaited the appearance of the promised bill, hoping to find in it the principles indicated in the council's memorial carried into full effect.

This expectation of your committee, however, has not yet been realised; for though your committee have reason to believe that the meditated bill has been actually prepared, its provisions have not been divulged so as to afford subject for comment. The "heads" of this intended bill your committee have seen; but, as the communication was private and confidential, your committee do not feel themselves at liberty to advert to them further. Whenever any bill shall be actually introduced, your committee conclude that full publicity will be given to it, and ample opportunity afforded to the whole profession for scrutinising its provisions, and judging of its fitness and sufficiency.

It has seemed to your committee, however, an unwise procedure, inverting what reason would regard

as the natural course of events—that, previously to the introduction of any bill for the general regulation of the profession, the Right Honorable the Home Secretary had notified to Parliament his intention of bringing in a preliminary bill for empowering her Majesty to grant a new charter to the Royal College of Physicians in London. This appeared to your committee a mode of prejudging the general question, which they conceived could not lead to good. Their impression was that the general profession should be first regulated by legislative authority; and that, afterwards, if new charters for the existing colleges should be requisite, these charters should be in conformity with the general enactment.

The general council, having taken the same views of the subject, lost no time in petitioning both Houses of Parliament to abstain from entertaining any measure of partial operation until the general question should be first decided by the discussion and enactment of the proposed bill. Several petitions to the same effect were presented from different parts of the kingdom; and your committee have the satisfaction of announcing that these have not been disregarded, the Right Honorable the Home Secretary having signified in Parliament his intention of not proceeding with the charters this session.

Such is the progress of the reform question carried down to the latest period, and such the present position of the profession in respect of it. In this position your committee see much cause for gratulation—for it manifests clearly how much advance the reform question has made since we were last assembled. The profession are now more awakened to the necessity of legislative interference, and they daily acquire a clearer comprehension both of the evils of their political condition and of the means by which these evils would be best rectified. The community, too, have become more sensible of how deeply their interests are involved in a right adjustment of the question; and neither the legislature nor the Government now evince any indisposition to give the subject a patient investigation. Whenever this can be adequately obtained, your committee feel too much confidence in the justice of their cause to harbour any doubt of the final result. It only requires for the profession itself to think calmly, reason justly, and devote to the accomplishment of its wishes the energies necessary in all human undertakings, to ensure the ultimate realisation of all that unbiassed reason would sanction.

But, in all attempts to amend social institutions, there ever are and always will be differences of opinion and conflicting interests, which demand that they who think alike should combine for the effective support of the opinions which they hold. It is not enough that they who think alike may actually constitute a large majority of the whole body. To repose with any confidence on the mere fact of such a presumed preponderance is a great weakness, and contradictory to all experience. However just the cause, or however preponderating in numerical amount its advocates, it will be sure to be circumvented by even small minorities, unless resort be had to those expedients by which minorities so often triumph. These expedients are—*union*, to combine strength—*organisation*, to render strength effective—and *energy*, to carry into effect the measures which mature deliberation indicates.

These three brief terms, which are worthy of being embodied in a political axiom, specify the elements of that policy by which combined endeavours for the attainment of a common good should ever be directed. Neglect of them has occasioned the cause of medical reform long to linger unadvanced. The time, however, is at length arrived when longer disregard of them would be neither safe nor excusable. Reform of some kind is at hand, and if it be not wisely directed it will beget evil instead of good. It rests with the profession to make that reform whatever their matured judgments most approve; for if they be true to themselves, and take the necessary measures for impressing on their rulers their genuine and honest convictions, no opposition can long continue to defeat them.

Your committee deem it needless to pursue the argument further. If what they thus faithfully and earnestly represent as their own convictions meet a corresponding feeling on the part of the Association, no difficulty can arise in instituting and elaborating those combined measures by which alone can success, in any undertaking, be attained.

In conclusion, your committee would respectfully submit to the Association, that, for all measures requiring the intervention of the Association during the intervals of the anniversary meetings, the general council is entitled to its fullest confidence; and, as some procedures will be inevitably called for ere the general Association meet again, the committee recommend that the hands of the council be strengthened by the following resolution being this day adopted:—

Proposed Resolution.—"That the general council be specially enjoined to watch vigilantly, during the ensuing year, over all proceedings in Parliament and elsewhere, which have any relation to the subject of medical reform; and that they be empowered to employ every means which their judgments may direct for upholding the principles of reform which the Association has so long and so steadily advocated; these principles being clearly and unequivocally declared in the several reports heretofore presented to the Association by their reform committees, and explicitly specified in the memorial lately submitted to the Right Honorable the Secretary of State for the Home Department, by the general council."

Dr. Barlow having concluded reading the report, Mr. Crosse, of Norwich, moved, "That the report of the reform committee be received and printed—that the thanks of this meeting be given to them for the trouble they have taken in preparing it, and that the committee be reappointed, and that the general council be especially enjoined to watch vigilantly, during the ensuing year, over all proceedings in Parliament and elsewhere, which have any relation to the subject of medical reform, and that they be empowered to employ every means which their judgment may direct for upholding the principles of reform, which the Association has so long and so steadily advocated, these principles being clearly and unequivocally declared in the several reports heretofore presented to the Association by their reform committees, and explicitly specified in the memorial lately submitted to the Right Hon. the Secretary of State for the Home Department by the general council."

Dr. Forbes, seconded by Mr. Crosse, proposed the admission of several foreign professional gentlemen as

honorary corresponding members of the Association, who, upon the recommendation of the first-named gentleman, were admitted.

Thus concluded the general business of the morning.

Mr. Newnham then read an able and amusing paper upon professional empiricism, which was received with much approbation.

Mr. Collyns, of Kenton, next exhibited to the meeting a young child, suffering from exostosis of the upper jaw.

Dr. William Budd exhibited a bottle containing a white, chylous fluid, which had been passed from the vagina of a girl five years of age. The fluid did not come from the bladder, for a catheter had been passed. As much as three pints of the milky-looking fluid were discharged during the day. There was no reason to suspect collusion or attempt at deception on the part of the little patient, who was an inmate of the Plymouth Hospital.

Mr. Toogood, of Bridgwater, read a case (with illustration) of exostosis of the hand, and removal of the metatarsal bone of the ring finger.

Dr. Hastings next read a letter from Dr. Jeffreys, of Liverpool, on gratuitous medical attendance, and the meeting separated.

EVENING MEETING.

The second general meeting of the society was held on the same evening at eight o'clock, when there was again a full meeting of the profession. The business was commenced by Dr. Shapter, who read an account from Mr. Collyns, of Kenton, of a case of osseous uterine tumor, which was found in the pelvis of a female eight years after burial.

The Chairman then called upon Mr. Sands Cox to read his address in surgery; but as that gentleman did not appear, Dr. Hastings said that he had not heard from Mr. Cox upon the subject, but was informed that he had been subpœned to Warwick in a case of infanticide.

Dr. Wallis, of Bristol, read some interesting cases illustrative of the good effects of incision of the scalp in the treatment of epilepsy and certain affections of the brain.

Some allusion having been made by Mr. Estlin to Dr. Pritchard's publications on the same subject, Dr. Wallis said that he had no intention whatever to set up any claim of priority against his friend, Dr. Pritchard.

Dr. Shapter next read the abstract of a paper from William Addison, Esq., of Malvern, on the corpuscles of the blood, and the formation of tubercle. The memoir itself will be published in the next volume of the "Transactions."

Mr. Pridham, of Exeter, said it gave him much pleasure to propose the resolution with which he had the honor to be entrusted, knowing that the subject of it was so capable of executing the task which he had undertaken. He then proposed, "That Dr. Shapter, of Exeter, be requested to deliver the retrospective address in medicine at the anniversary meeting for 1843."

Mr. Besley, of Exeter, seconded the resolution, and heartily concurred in all that had been advanced by the mover of it, and bore ample testimony to the qualifications of his townsman to fulfil the honorable duty imposed upon him.

Dr. Shapter felt gratified with the honor conferred upon him, and hoped that his labors would meet the the approbation of the Association.

Mr. Wickham moved "That William Hey, jun., Esq., of Leeds, be requested to deliver the retrospective address in surgery at the anniversary meeting for 1843."

Mr. Mortimer, of Clifton, seconded the resolution, and it was carried unanimously.

Mr. Hey briefly acknowledged the compliment.

Moved by Mr. Pridham, of Exeter, seconded by Mr. Hunter, of Budleigh Salterton, "That the thanks of the meeting are due, and that they be given, to the poor-law committee, for the zeal and energy manifested by them on the subject of poor-law medical relief."

Dr. Hastings produced a letter from Mr. Guthrie, late president of the College of Surgeons, on the subject of poor-law medical relief; but, as it had appeared in all the medical periodicals very lately, it was not considered necessary to read it.

Dr. Black then read a communication from a medical officer of the Leigh union, Lancashire, relating to the inadequate remuneration of medical officers in unions, and commenting on the injustice of the guardians, who seek, by their system of tendering, to reduce still lower the present inadequate remuneration allowed by the commission. The writer stated that, during a period of eleven months, the rate of payment per head was 2s. 11d., and showed that, with the most meagre attendance that could possibly be given, each case would come to 7s.; the union authorities being, consequently, the gainers of 3s. 7d. per case by their illiberal system of accepting the lowest tender they could get. The paper was received with much satisfaction by the Association.

The attendance was tolerably numerous, and the proceedings did not terminate till twelve o'clock at night, when the meeting was adjourned to twelve o'clock on Thursday.

THURSDAY MORNING.

On Thursday morning a numerous body of members visited the Exeter Hospital, through the wards of which they were conducted by Mr. James. Several interesting cases were exhibited and examined; amongst them we noticed a case of varicose aneurism of the scalp, in a young woman twenty-five years of age; the tumor had commenced soon after birth, and had continued to extend from the occipital region over the vertex and towards the ear. The gentlemen who examined this case seemed to be of opinion that nothing could be done for the patient's relief except attempting to check the growth of the tumor, by tying the chief arteries which passed into it.

In another ward we noticed two patients affected with varicose veins of the leg; they had been successfully treated by a method of which Mr. James spoke very favorably. A linen compress, moistened with Goulard's lotion, is placed over the enlarged veins, and covered with a piece of oiled silk; a wet pasteboard splint is then applied, and allowed to take the form of the limb, and the whole supported by a common bandage.

But the cases which attracted most attention were several examples of adhesion of the lower jaw to the

chest, from vicious cicatrization after burns. Several cases in progress of treatment were exhibited; after having divided the cicatrix, Mr. James applies a simple instrument, by which the jaw is kept elevated from the chest, and he assured the meeting that if the patient perseveres in the use of this instrument for eight or ten months, a cure is attained even under circumstances apparently the most unfavorable.

The members again met at the Athenæum at twelve o'clock: Mr. James in the chair.

Dr. Barlow commenced the business by reading the

REPORT OF THE BENEVOLENT FUND.

The central committee for the management of the benevolent fund of the Provincial Medical and Surgical Association have the satisfaction, after more than two years' suspension of their functions, as far as appertained to relieving the wants of their necessitous brethren, to state to the Association that they are now placed in the situation contemplated by the resolution passed at Southampton in the year 1840—viz., after paying off the debt due to the donation fund, they have now, as will be seen by the treasurer's report, somewhat more than *one hundred pounds* of subscriptions available for the purpose of relieving cases of urgent distress; but they deeply regret to add, that immediately after this anniversary meeting it will be their duty to take into consideration a great number of very urgent cases that have been brought before them, especially during the past year, and for the moderate relief of the most urgent of which the sum in their hands is totally inadequate. They trust, therefore, that they will stand excused in once more making a very strong appeal to the benevolent members of this Association for a small annual subscription to this fund. The amount of good that might be effected is incalculable, would only each individual member of this Association give annually *five shillings* to this charity; from the more wealthy members of the profession the committee would hope to receive a more liberal contribution. They would also strongly urge upon *all* the propriety of interesting the more wealthy amongst their patients in the cause of this charity. It certainly can scarcely be looked upon as otherwise than a reproach to the medical profession that this fund should have been in existence no less than *seven years*, and had met with such very inadequate support and countenance. With the small means confided to them, the committee had been able to effect much good, to smooth many difficulties for unfortunate brethren, and to succour and solace the widows and orphans of others; and if the Association and other benevolent individuals would but afford them the means, they would be enabled annually to present such a report of cases relieved as could not fail to be gratifying to every friend of humanity, and reflect honor upon the Association and profession in general.

But, although the committee have for the last two years been unable to give any account of cases relieved by the fund, they have the satisfaction of announcing to the Association that the constitution, rules, and regulations for the management of the fund have been considered so excellent, that they have been adopted almost *verbatim* by the Medical Benevolent Fund Society of Ireland—an institution lately formed, and which appears to be taken up with great spirit and energy by the members of the profession in the sister country. The institution of this society was, indeed, suggested by our benevolent fund, which has thus served as their model, their fund being one of pure charity, similar to our own. Thus, although our fund may have failed in procuring direct support to the extent that we hoped and expected, it has at least been the means of doing good, by inciting others to adopt similar measures.

It may be, too, that the obligation due to us for directing them to a safe and efficient constitution in their body may be returned to us in the benefit of their example, and that the energy with which their design is followed up, and the countenance given to it, may incite our members to "go and do likewise."

Let us all, then, endeavour to the utmost of our ability to support this admirable institution, and to interest all our friends in its support. We shall thus assist in relieving the anxious cares of many a deserving but unfortunate brother, and at the same time gratify the best feelings of our nature.

JOHN BARON, M.D., President.
W. CONOLLY, M.D., Sec. and Treas.

Mr. Newnham rose to move the resolution, and complained that, after having examined the list of subscribers to the benevolent fund of the Association, the amount received was principally from non-professional friends, through the interest of a few medical brethren; and he inquired, could the fund be supported, seeing the source from which the money had emanated? Could they again ask their non-medical friends to give donations? No; the support must come from the members themselves, whom, it would appear, took but little interest in its success, when, from about 1,350 members, only a little more than £100 had been subscribed. He wound up a very able appeal by relating an anecdote, which concluded by showing the sympathy of a *friend* who could feel for the sufferings of his fellow-men in every place but his pocket. This, he thought, was the case with the members of the Association. (Cheers.) He then moved, "That the report of the benevolent committee be received and adopted, and that the thanks of this meeting be given to them for the exertions they have made to increase the funds of this important branch of the Association."

Mr. Fuge, of Plymouth, seconded the resolution, and hoped the appeals of Dr. Barlow and Mr. Newnham would be responded to in a manner that would do credit to the members of a liberal profession.

Mr. W. Hey, jun., of Leeds, said that, in the North, they had a benevolent fund of their own, which was, no doubt, the case in other parts of the country, to which members contributed, perhaps before the present fund was contemplated.

Mr. Martin also made some well-timed remarks.

Dr. Hastings was glad to say that the members in the neighbourhood of Mr. Hey and Mr. Martin were liberal contributors, and that, since the appeal which was made when the tenth volume of "Transactions" was distributed to the members, he had received about four times as much as he had done in any previous corresponding period.

Mr. James (the president) also appealed to the members for their support, and concluded by observing, that it would be singular that a profession

which was renowned for its liberality to all others, should not be so to its own members.

Dr. Boisragon followed, and spoke of the good effects which the fund had already done in its limited capacity; and said, however affluent we may appear at the moment, there was no telling which among us may be glad, at some period, to apply for relief.

The resolution was then put to the meeting, and carried unanimously.

Mr. Estlin, of Bristol, inquired of the Chairman whether the address in surgery had been received from Mr. Sands Cox, or any explanation why the meeting was to be deprived of the usual communication on this interesting subject.

The Secretary replied that he had not heard from Mr. Cox since his arrival in Exeter; but he had beforehand, stating that he had been subpœned to Warwick, to give evidence in a case of infanticide.

Dr. Black, of Manchester, then proceeded to read the retrospective address in medicine, which occupied upwards of two hours in the delivery, although a great part was unavoidably omitted for want of time. As it will be published in the society's "Transactions," any notice of it here would be superfluous.

Mr. Turner, of Manchester, moved, "That the thanks of this meeting be given to Dr. Black for his excellent address, and that he be requested to print it in the 'Transactions.'"

Mr. Crowfoot, of Beccles, seconded the resolution, and it was carried with applause.

Mr. James (the president) regretted that Dr. Black's address had not been divided into two parts; and, if he had known Mr. Cox's address was not to be delivered, he should certainly have suggested such a proceeding, and induced Dr. Black to have read the first part on Wednesday evening.

Dr. Forbes thought that in future it would be much better to divide the two addresses into three (one to be devoted to anatomy and physiology), which would shorten the labor of each, and give the lecturer an opportunity of more fully considering the various parts appropriated for his consideration. For one, he would bear ample testimony to the able manner in which Dr. Black had treated upon a subject of such an extensive character, and had no doubt the learned gentleman would concur in the suggestion he had thrown out.

Dr. Black we understood to agree with Dr. Forbes.

Mr. James (the president) said there was a great deal of force in Dr. Forbes's suggestion, and he would take care it did not go unconsidered.

Dr. W. Budd, of Bristol, laid before the Association a series of casts and drawings, taken from a great variety of cases, in which the lesions or other abnormal conditions, were repeated in corresponding parts of the body in a perfectly symmetrical manner.

In addressing a few explanatory remarks to the meeting, Dr. Budd began by stating that the cases to which he now ventured to call the attention of the Association, formed the ground work of a paper which he had the honor of reading before the Royal Medico-Chirurgical Society, in the autumn of last year. As that paper would shortly appear in the forthcoming volume of the Transactions of that society, he should not now have trespassed on the time and attention of the meeting, were it not that on account of the great cost of engravings, the society had decided on publishing only two plates to illustrate the paper. He was, therefore, naturally anxious to submit the whole series of illustrations to public inspection, lest it might be thought the speculations connected with them were built upon the slender foundation of a few singular and isolated cases, instead of being, as they really were, inductions from a fact, which, from its very general occurrence in a great variety of chronic diseases, and from the nature of the agencies concerned in its production, was justly entitled to the rank of a law in pathology. As, moreover, many of these illustrations were recent, and had never yet been before the public, and as many among them were, in themselves, interesting objects, Dr. Budd trusted he should not be deemed intrusive in introducing them to the notice of the Association.

As, however, the speculations to which he had been led by a study of these cases were shortly to appear in their full development, he would not detain the meeting by detailing them at length, but would merely state in few words one or two of the principal results of his research, confining himself strictly to such remarks as seemed necessary to render the facts intelligible.

Dr. Budd then observed, that if all the illustrations were passed in review, it would be seen that, however widely the morbid changes they exhibit might differ in their nature and seat, in different cases, there was one remarkable fact common to the whole series—namely, the repetition in corresponding parts of the body of lesions or other morbid conditions, exactly alike in nature and outward character. A careful analysis of all the cases in which this fact occurs had led him to divide them into two principal groups; the first, including those in which the abnormal condition depends on fault originating in the solids affected; the second, those in which it arises from morbid states of the blood.

As examples of the former group, he referred to several cases of symmetrical monstrosity, drawings of which were exhibited to the Association.

A case of symmetrical monstrosity in the flower of the common anemone was pointed out, as being an example of the same fact in a more simple being.

The second group Dr. Budd had been led to divide again into two others: the first being made up of cases in which the morbid state of the blood consists in deficiency of natural ingredients; the second of those in which it depends on the presence of noxious agents in that fluid.

The ulceration of the cornea occurring in animals fed on substances deficient in nitrogen, or exhausted by repeated bleedings, was referred to as a distinct example of the former. And it was curious to observe, he remarked, that not only did this ulceration affect both eyes, but began at exactly corresponding points in both corneæ.

The cases included in the last group—those in which the morbid states of the blood consist in its contamination with noxious agents—were, however, far more numerous and important, comprehending, in fact, a vast province of humoral pathology.

With the exceptions before alluded to, Dr. Budd regarded all the illustrations laid before the Associa-

tion as examples of it. In regard to this group of diseases, the theory advanced was, that not only do they all depend on the presence of morbid matters in the blood, but that in any given case the morbid matter peculiar to the disease is detained in the seat of each individual lesion, and is there held in union or affinity with the part affected.

Dr. Budd would not enter into the arguments on which this inference was founded, but merely refer the Association to a case, in which both points of the theory were distinctly exemplified. It was the well known case of wrist-drop, or the palsy of the wrists from absorption of lead, which so frequently happens in painters and in persons employed in lead manufactories. This was, Dr. Budd remarked, strictly a case of symmetrical disease, and indeed a very remarkable one; the paralysis being curiously limited to the same small group of muscles in both arms—namely, the extensors of the wrist. And this same limitation showed that the paralysis did not here depend on any affection of the central parts of the nervous system, but on the local action of the lead on the palsied muscles. According to the theory advanced, the lead should, therefore, be found accumulated in these muscles. Now this, Dr. Budd said, was the case. In the autumn of last year, a man was admitted into King's College Hospital, affected with wrist-drop, and also with epileptic attacks, of which he speedily died. After death, the palsied muscles were analysed by an eminent chemist, and lead was discovered in them in very considerable quantity.

A case of symmetrical gouty deposit in the ears, of which a drawing was exhibited, was also referred to as an unequivocal illustration of the theory.

Dr. Budd then remarked that, in relation to this group of diseases, the law of symmetry takes a specific form, and requires a separate interpretation; for it was clear, according to his theory, that the agency which causes the lesions to assume a symmetrical arrangement in these cases, was, in fact, *that* which causes a special morbid matter in the blood to fix upon a given part in preference to any other; and this agency he conceived to be the same as that which presides over ordinary assimilation, and in virtue of which fellow parts separate from the blood, and appropriate matters of identical composition, and in equal measure, and thus preserve through life their original likeness. The same election was made, and by the same agency, whether the matters presented to them were the materials for their ordinary nutrition or the elements of a morbid process. This was a simple and clear view of the case; it satisfied all the requirements of the facts, and, as Dr. Watson had kindly remarked, "It brought the phenomena, not only of gout, but also of many other important complaints, within the operation of one general, comprehensive, and intelligible law." He might have included also that great and important class of medicines which take effect after absorption; for, whether the agent present in the blood were morbid or medicinal, the law of action was the same.

Dr. Budd concluded by saying, that, since these views were made public, he had the satisfaction of of seeing them adopted by some of the most distinguished physicians of this country. The favorable manner in which Dr. Watson, who was so justly eminent, and so universally esteemed for his great knowledge and sound judgment, had introduced them to public notice in a late number of the "Medical Gazette," had been to him (Dr. Budd) a source of high gratification.

As these views concerned one of the most interesting departments of animal chemistry, he need scarcely add, that it was with peculiar pride he had observed the close correspondence between them and certain doctrines touching the actions of medicines, lately given to the world by the celebrated Liebig, in his new and important work on Chemistry, in its applications to Physiology and Pathology.

Dr. Hastings exhibited a colored drawing, taken from a tumor which projected from the mediastinum into the thorax of a female. The symptoms which existed during life were of a very obscure and doubtful character.

Mr. Turner showed the cast of the foot of a man who had suffered compound dislocation of the astragalus. After having described the case at length, Mr. Turner related several other analogous cases, derived from authors, and showed that his own was the only one on record of complete dislocation of the astragalus, unaccompanied by fracture or serious injury to the other bones of the foot. The communication of Mr. Turner was listened to with great interest, and, at the request of the Chairman, he promised to send it for insertion in the "Transactions."

Mr. Fuge communicated a case from Mr. Squire, of Plymouth, in which the extraction of a stone was rendered difficult after lithotomy, from the peculiar form of the calculus.

Mr. Pridham read a case of calculus in a female, which was discharged spontaneously.

Dr. Barlow exhibited the fragments of a calculus which had been broken down by Mr. Norman, of Bath.

Mr. Jerrard, of Honiton, read a case of tumor in the rectum, removed by ligature.

Dr. Hastings read a case from Mr. Higginbottom, of Nottingham, with the description of an instrument for arresting hæmorrhage after the extraction of teeth.f

Dr. Hennis Green read a paper by Mr. Ley, o London, on the use of Indian hemp in convulsive diseases.

A few cases were left unread for want of time.

Dr. Henry Fox, of Bristol, rose to propose the following resolution. He regretted he had not more frequently attended the meetings of the Association, as, from the information which had been imparted at the present one was an ample reward for any exertion he had made to be present. He had received an abundant recompense, and he felt the great and deep sense of obligation he was under to those gentlemen who had read cases to the meeting. This feeling, he was sure, he was joined in by all present. He then moved, "That this Association is indebted to those gentlemen who have read cases and presented communications at this meeting, for which the thanks of the members are hereby tendered to them."

Dr. Daniel, of Bath, seconded the resolution, and was certain the gentlemen who had entertained the meeting with the interesting and gratifying cases which had been read, deserved their most cordial thanks and deep sense of gratitude. (Cheers.)

Mr. Trevor, of Dulverton, then proposed, in a neat and complimentary speech, "That the thanks of this meeting are eminently due, and that they be hereby tendered, to Drs. Green and Streeten, for the liberal arrangements made by them for the weekly supply of the 'Provincial Medical Journal' to the members of the Association." (Great applause.)

Dr. W. Budd seconded the resolution, which was carried unanimously.

The President said the editors had certainly devoted themselves to the cause in a manner which no editors ever did before, and he was glad the members so warmly acknowledged the sacrifices made by Dr. Green and Dr. Streeten.

Dr. Green briefly returned thanks.

Dr. Black moved, "That the anniversary meeting for the year 1843 take place at Leeds, and that W. Hey, Esq., sen., be appointed president-elect."

Mr. Bottonley, of Croydon, seconded the resolution, which was put from the chair and carried unanimously.

The Secretary congratulated the members upon their adoption of the resolution, and assured them a more numerous requisition had not before been presented to the Association. The present invitation contained about 120 signatures of the most eminent in the profession in the North of England.

Dr. Robertson, of Northampton, moved, "That the thanks of this meeting be given to the different public bodies in Exeter, who have so handsomely assisted its objects by the facilities they have afforded the Association at this anniversary meeting."

Mr. Estlin seconded the resolution, which was adopted with cheers.

Mr. James then vacated the chair, which was occupied by

Dr. Boisragon, who said that it now became a pleasing part of the business of that meeting to return their thanks to their president for the dignified and fitting manner in which he had performed the duties that had devolved upon him during the sitting of the members. (Great cheering.) He was certain that all the members were duly sensible of the kindness which had been exhibited by their worthy chairman in promoting the objects of the Association, and in providing for the comfort of those who had attended the meeting. (Great cheering.) He, for one, returned him his thanks, and wished him many days to promote the objects of the Association with equal courtesy and firmness. (Immense cheering.) He proceeded further in a very complimentary manner, and then proposed, "That the thanks of this meeting be given to the learned and worthy president for his unwearied attention to the members, and for his zealous exertions to promote the prosperity of the Association." (Cheers.)

Dr. Barlow concurred in all that had fallen from Dr. Boisragon, and briefly seconded the resolution.

Mr. James shortly returned thanks. It gave him pleasure if he had contributed in any way to the comfort of the members, and hoped to sustain the good opinion which they had expressed. He regretted that he had been, from the shortness of time, obliged to cause gentlemen to curtail their papers; but he was sure his motive had not been misunderstood, but appreciated. It would have given him delight if they could all have been heard at full length, and was glad that his exertions had met their approval. (Great cheering.)

The meeting broke up about five o'clock for

THE DINNER,

which took place at the New London Inn, at six o'clock. T. H. James, Esq., the president of the Association, took the chair; and the company consisted of about 130 members of the profession, including nearly all the gentlemen who had visited the city from a distance. The Venerable Archdeacon Pott, Chancellor of the cathedral church of Exeter, and C. H. Turner Esq., the Right Worshipful the Mayor of the city, were also present as guests.

The Rev. Chancellor Pott performed the religious services of the table.

On the removal of the cloth the Chairman gave "The Queen," "His Royal Highness the Prince of Wales," "Prince Albert and the rest of the Royal Family," all which toasts were received with the most enthusiastic demonstrations of loyalty and respect.

The Chairman said the next toast upon his list was the "Bishop and Clergy of the Diocese"—(cheers), and it was one which he felt it to be his duty to introduce with a very few observations. The character of the eminent Prelate who so ably presided over the affairs of this diocese was too well known and too highly apppreciated to require either comment or eulogy from him. (Cheers.) In speaking of the clergy, he need not confine himself to this diocese alone, for he was addressing gentlemen from various parts of the country who were fully able to appreciate the faithfulness and zeal with which their important and arduous duties were everywhere performed. He was quite satisfied that every one who heard him would concur with him in saying that no body of men in this empire were better entitled to any mark of respect which could be shown them, and especially by members of the medical profession. They were ever among the foremost in promoting all works of benevolence and charity, and in alleviating the distresses of their fellow men. At the bedside of the suffering patient the medical man often found in them his best assistants, and they were always ready to administer the consolations of religion, which alone could take away the bitterness of that cup of which every one of us must drink. He need say no more to ensure for the toast which he had now to give a most warm and enthusiastic reception. He was happy, however, in being able to couple with it the name of a distinguished individual who had honored them with his presence this evening, and of whom he was proud in saying that he was himself the son of one of the most eminent surgeons of which this or any other country had ever been able to boast. (Cheers.) He gave them the health of "The Bishop and Clergy of the Diocese," coupling with it the name of the Rev. Chancellor Pott. (The toast was received with the most enthusiastic cheers, which were several times renewed.)

The Reverend Chancellor Pott rose to return thanks; he assured the president and gentlemen to whom they owed this obligation, of the high sense which they could not fail to entertain of the value of such a token of their good will and esteem. Their paths of public service were never far asunder, and had common objects of well-doing and benefiting others for their end; in which en-

deavour he would say with confidence they, in whose names he made the acknowledgment, would always most gladly co-operate. The Lord Bishop of the diocese was at this time engaged in an arduous visitation, which would occupy his whole time for more than two months, and was therefore entitled to their good wishes for his health. The Chancellor then observed that it would have been abundantly sufficient for him to have found a place as a silent guest among those whom he so highly respected; he could not, however, easily forget that he had a claim of connection with those whom he had the honor to address, and that he might be allowed to use this privilege by right of birth. It was not for him to say with Æneas—

> "Et genus et proavos et quæ non fecimus ipsi,
> Vix ea nostra voco:"

for he had nothing better to put forward. In that assembly it was, he said, a welcome thing to him to share any notice or distinction with an honored parent: if he had advanced in life by any thing he could call his own, it was but a poor copy of a model which had been set before him from his earliest years; from that parent he had learned a maxim which had ruled his course in life—that none could be qualified to teach who did not know what had been taught before; for otherwise he might be led to challenge for his own, discoveries that had been long since known, and might be laughed at for his pains. Another maxim he had gathered from the same lips—that if we see further than they did who went before us, we should remember that we stand upon their shoulders, and have escaped from many disadvantages under which they labored. To the same object he well remembered a remark which was coupled with the former observation—that in the science of anatomy, from which the old writers were debarred, we could not collect much from them; but in the description of diseases, and the accurate knowledge and detail of symptoms, they had left little to be added. The Chancellor on this head observed, that he remembered in early years to have seen, in the annual ticket for the anniversary kept at St. Bartholomew's Hospital, an engraved medallion, bearing the image of some sage person, Hippocrates or Galen, contemplating a skeleton found by accident in some desert place, the bones of which had been picked by crows or vultures, but certainly not laid bare by the knife of an anatomist. If he was mistaken in this particular, he was quite sure that in the same ticket there was this motto, the first bit of Latin he had ever learned:—

> "Quæ prosunt omnibus artes;"

and never surely could such a line be more applicable than to those whose lives were employed in restoring health or prolonging life. The Chancellor added that he need not remind the learned persons whom he had the pleasure to see around him that the professors of the healing art had experienced their days of persecution and their term of exile; such were the barbarities of early times, and that too in countries boasting much of their proficiency in art and science. But in times much later, and not far distant from our own good Bishop of this diocese, the much honored Bishop Hall, the first English satirist, in one of his beautiful little satires, which Pope had the good sense to admire, begins with these words:—

> "Worthy were Galen to be weighed in gold,
> Whose help doth sweetest life and health uphold;"

and then follows a lively description of the indignities to which in his time the profession was subjected, with a keen remonstrance on the niggardly reward for benefits thus bestowed on others. The Chancellor begged leave to congratulate those present that a better and more generous spirit now prevailed, of which he might be allowed to give an instance in the case of one upon whose tomb this day a wreath of honor had been cast. He was the son of a poor widow with only a crooked guinea for his patrimony—a relic which he (the Chancellor) now had in his possession; and though patronised for a time by a worthy prelate of our church, was the author of his own position by his indefatigable industry, his talents, and the love of his profession, without which none can prosper in any arduous pursuit. The fair provision which he made for eight of us (said the Chancellor) may show that there is a more generous feeling of benefit received existing in the present age. Towards the close of the speech the Chancellor adverted to a correspondence he once had with an excellent prelate, Bishop Burgess of Salisbury, who was engaged in controversy with an infidel opponent, who claimed the medical body as his allies and the friends of infidel opinions. To this base and groundless calumny the Bishop wished to oppose the known examples of the host of eminent men who could furnish the ready answer to that gross and most injurious falsehood. The Bishop applied (said the Chancellor) to me, not only from my connection by descent with the profession, but well knowing also that I laboured under a disease which all the labor of those around me could not cure—*bibliomania*. He looked therefore to me and my books for a list of persons to confute the vile assertions. It was a very welcome and no hard task to call up the "mighty dead" without the aid of necromancy, and I could have easily supplied the list then sent with many more whom in my own time I have had the happiness to know—such men as Heberden, and Harrington, and Gisborne, with the two Lathains, my parishioners for some years, and with another near connection to myself, Monro; and of the other branch of the profession, such men as Pearson and Abernethy, who with all his singularities, had, as I well know, no such foul peculiarity; and allow me to add another link to my connection with you, such men as Henry Earle, the grandson of my father, and the heir of his unwearied application, of his well earned credit and success in life; though the public was, alas! deprived of his services at an early period of his life, yet he has left the relics of his skill and knowledge in his writings. If there is any one in the assembly whom I have the honor to address, who with me heard the introductory lecture of my nephew at the college, he will know what the temper of his head was, and what the dispositions and sound creed of his heart. I will only add (said the Chancellor) that if I had now to make up my list for the Bishop, I could join to it the names of all around me; for I am persuaded that there is not one person in this room who would hold up his hand for the infidel, or teach

men so to abuse the loan of life, or to insult its Author. I have now to repeat the best thanks of those in whose name I have spoken, together with my own, with our warmest wishes that you may enjoy what you are so seduously engaged in cherishing for others—the blessings of health and long life from the Giver of all good gifts.

The Chairman said they must not forget another distinguished individual who had honored them with his company that day; he meant his friend who sat at his right, the chief magistrate of the city of Exeter. (Cheers.) The Association had already held its meetings in many of the most important cities of the empire; and wherever it had gone it had achieved easy yet secure conquests. In every place which they had visited they had at once laid the municipality at their feet. (Hear, hear.) He was quite sure that the Mayor and Council of Exeter would readily have done all that had been done by other places to welcome, and do honor to, the Association, if they had had the good fortune to possess the same ample means. (Hear, hear.) That they had not been able to do so had not arisen from any want of inclination. He was convinced that the members of the Association would readily concur with him in paying this mark of respect to the municipal body of the city, and he had, therefore, great pleasure in proposing, "The Mayor and Town Council of Exeter."

The Right Worshipful the Mayor rose to acknowledge the toast. He said he was sure they would be happy to hear that there were at that moment in the room two gentlemen of their own profession, who had attained to the honorable distinction of filling that chair which it was now his high privilege to occupy. He alluded to his friend the Chairman and to Mr. De La Garde. (Cheers.) He would appeal to either of those gentlemen to say whether ever before a Mayor of Exeter had been placed in so awkward a position as that in which he found himself at that time. (Hear, hear.) He was not, indeed, afraid of being dissected (laughter); but he certainly found himself unable adequately to express his thanks for the honor which they had just conferred upon the city of Exeter, through himself. They had assembled here from various parts of the country, not for the purpose of political agitation—not with the view of setting the rich against the poor—but with a far higher and nobler object, that of teaching to all classes of the community the obligation which they owed to the medical profession. (Cheers.) He confessed, then, that he did feel proud of the honor they had conferred upon the city; and in looking back in after times upon this, the year of his mayoralty, there would be no circumstance on which he should reflect with greater pleasure than on the fact, that during that year Exeter had been selected as the meeting place of the Association, and that he himself had enjoyed the highest privilege of being admitted among them as a guest. (Cheers.) He would venture to hope that they, too, in looking back upon the present meeting for many years to come, would always bear in mind the assurances which he gave them, that the citizens of Exeter wished them well all the days of their lives. (Great cheering.)

The Chairman said he had next to call on them to drink a toast to which he anticipated a prompt and most enthusiastic response—it was that of the founder of the Association, Dr. Hastings. When they remembered that ten years ago the members of the medical profession in the provinces were without any common bond of union (hear, hear); that although they possessed within themselves the elements of great strength, of moral energy, and of high character, yet these were of little use, because they were never found joined together for any practical purpose (cheers); when they remembered, also, that it was to Dr. Hastings they owed the formation of this great Association, in which, for the first time, they had found that bond of union which they had long so much required—which had given to them an amount of influence, and produced among them a degree of harmony which had never before existed—which had the effect of bringing together the members of the same profession from one end of the kingdom to the other to meet at some common point, where old friendships were renewed and new friendships formed, never afterwards to be forgotten—which had furnished them with an inducement sufficiently strong to draw them for a season from their homes, in order that they might interchange feelings of mutual friendship and good will, and unite not merely to uphold the honor and dignity of the profession, but also for the more extended diffusion of scientific knowledge, and so to benefit mankind; when he repeated, they bore in mind that it was to Dr. Hastings, the secretary and founder of the Association, that they owed these manifold advantages, he was sure they would need no stronger motive to induce them to drink this toast with all the honors which it was possible for them to bestow upon it. (The toast was drunk with the most enthusiastic cheering, which was repeatedly renewed.)

Dr. Hastings rose to return thanks, and spoke to the following effect:—Mr. President and brother members,—The very kind manner in which you have invariably expressed your feelings towards me has ever claimed my warmest gratitude. After ten years of service, during which many imperfections in the performance of my duties must have been apparent, any tribute from you would have been acceptable; but after the enthusiastic manner in which you have conveyed your thanks, I feel satisfied that any words which I can use on the present occasion would convey inadequately the sense of my obligation to you. It is a proud distinction to me to be considered the founder of this noble institution; and when ten years ago I commenced, in conjunction with many friends I now see around me, the formation of this Association, I little dreamt of its ever attaining the eminence it has already acquired. During those ten years, Sir, our Association, like the noble oak of the forest, has struck its roots deeply into the midland counties, and has thrown out vigorous branches to the north and to the south, to the east and to the west. During this comparatively short period what have we done? I am aware that this question has been sometimes asked tauntingly—but what have we done? We have every reason for answering this question; not indeed in the spirit of self-glorification, but with truth and modesty, in order that we may place our claims to public confidence on their true footing. I reply, we have every year published a volume of "Transactions," and that these ten volumes form a rich treasury of practical

information; and more especially, we have done more towards accomplishing that very desirable object, the procuring a medical topography of England, than had previously been effected. We have thus, in a scientific point of view, raised the character of the provincial profession, who heretofore, notwithstanding many eminent men had arisen among them, had no claim as a body to any distinction. We have also, during the last year, succeeded in supplying to every member of our Association a weekly journal, as a vehicle by which all discoveries made in this active and experimental age are conveyed to every part of England; so that shortly after their promulgation any improvements in medicine made in our own country, on the continent in America, or in any part of the known world, are conveyed to the remotest villages in England, and a boon is thus conferred on suffering humanity. In the history of epidemic diseases we have also rendered good service, as witness our report on influenza and on the late epidemic small-pox; and is it not admitted that the report of the committee of this Association on small-pox and vaccination has been of vast importance, by rousing the attention of Government to this vital question, and by inducing the Parliament to legislate on the subject, from which, notwithstanding the measure is imperfect, great benefits must ultimately ensue. Mr. Ceely's invaluable labours on vaccination have also, through the liberality of this Association, been brought before the public, and the identity of small-pox and cow-pox has hereby received an irrefragable confirmation. Since the formation of this Association, that notable measure, the new poor-law, has come into operation—a measure which, whatever might have been the intention of its framers, threatened to degrade the profession, and seriously to injure the sick poor. This Association was the first public body to stand forward to vindicate the cause of science and humanity—of the profession and the sick poor. You all know how active our poor-law committee have been—how frequent their representations have been to Parliament, to Government, and to the poor-law commissioners. At length some reward has been given to those arduous labors, and still more is expected. I will affirm, without fear of contradiction, that to our poor-law committee is due a great debt of gratitude for the unceasing endeavours they have succesfully employed to bring about this desirable consummation. But what shall I say on that thorny and difficult question, medical reform? I had the honor of reading an address to the Association, at Worcester, where it was so happily formed, and I then said, "The organisation of the profession which obtains is not what it ought to be; for the whole system of medical polity in this country is both defective and erroneous. Opinions differ widely as to the evils and remedies, but few are found to commend the existing state of things." I believe I might now say that *none* are found to commend the existing order of things; for within these ten years this question has made immense progress, and it is now certain, since Government has taken this matter into its own hands, that these evils will receive attentive consideration and some remedy. On this Association now devolves a great duty, which I trust they will fearlessly, but at the same time discreetly, perform; and there can be then no doubt our voice will be heard, as it cannot be otherwise than that the united voices of 1,400 educated and honorable men must command attention. I fear, Sir, I shall weary you, but I cannot resist calling to your recollection that we have not been satisfied with pursuing those objects which may be considered scientific and professional. We have not forgotten the necessitous among our brethren, and have conveyed the healing balm of charity to the wounded spirit of some of those who have fallen into unavoidable distress. The benevolent fund, Mr. President, must ever be considered a most important branch of our annual proceedings; and although we have not at present done all in this respect that might have been done, I look forward to the future with the same sanguine expectation that an abundant harvest will reward the endeavours we are now making. But among all the distinctive features which impress a value on the face of our Association, I know of none more likely to affix a value upon it than the annual festivals which we celebrate in the provincial towns. We have already been at several towns—at Oxford, that ancient seat of learning and science; at commercial Bristol; at modern Tyre; and at the ancient metropolis of the north, where, ages ago, the Roman eagle was triumphant, and where the splendour of the conqueror was displayed. We are now come into this beautiful, romantic, and peninsular part of the island, to celebrate our tenth anniversary in the ancient capital of the west. We have been received here, as we have been in other cities, with marked distinction, not only to our own profession, but by the authorities, civil and religious. If I had never on any occasion received any reward than that of hearing what has this day fallen from the Venerable Chancellor Pott, I should have considered myself amply remunerated for my labors in this Association. The eloquent and successful vindication of our profession from the calumnious charge of infidelity made against it by some inconsiderate persons, was particularly grateful to my mind; and I will take upon me to say that these words will not be readily forgotten by those who heard them. Moreover, it increases our gratitude to the undying Pott, for having instilled such sentiments into the venerable divine, as the son of a medical man could alone be capable of such sentiments. On this occasion, as on all former ones, we have also been gratified by renewing old friendships and making new ones. We hold out to each other the right hand of fellowship, and practically endeavour to uphold the honor and dignity of the noble profession to which we belong. I must yet, Sir, detain you a little while: I have spoken of the objects of the Association, and of the manner in which we have been engaged. Having, therefore, hinted at what we have done, I now ask, what are we about to do? This, this is the question: for the future I want not your acquiescence only, but your persevering, steady, energetic, and united efforts to carry forward the good work in which we are engaged. For myself, I feel that after twenty-five years of active professional life, during ten of which I have been engaged in your service (knowing, as I do, that the active years of manhood are but few), the time will be arriving when I shall be no longer equal to the very active life I have hitherto led. I regard this Association as formed not

for our own little day, but to be handed down to future time; and it behoves you to provide the means for future labors. We have arrived now at an eminence from which we can take a Pisgah prospect of the future, and I confess I see the distant horizon fair and beautiful, and neither shadows, clouds, nor darkness, rest upon it. Let us, then, pursue our way rejoicing at the success which has attended us under such aspirations. Mr. Chairman, I close my lengthened remarks with a firm hope that this Association, long after the wind whistles over the sod that covers my lifeless remains, will continue to flourish, and to be the means, for time yet to come, of ministering to the sickness and sorrow of our fellow-men. (Cheers.)

The Chairman again rose and said—The allusion which Dr. Hastings had made to the benevolent fund made this a very fit opportunity for fulfilling a promise which he had made in the afternoon, by introducing a toast having special reference to that subject. It could hardly be necessary to say much in commendation of so laudable an object. The profession to which they belonged was exposed to more casualties, to greater chances and changes of fortune, than any other. Many men who had flourished—and flourished greatly, too, in their day—had left unprovided widows and helpless orphans (hear, hear); while many others, who had never flourished to a like degree, had fallen into a state of hapless poverty and destitution. (Hear, hear.) It was on behalf of those that he now made this appeal, for it was for their relief that the benevolent fund was designed. It was brought forward in the morning as a substantial motion, that all the members of the Association should subscribe to the fund; but to that proposition he did not assent, because he felt that whatever was done in the way of charity should be done voluntarily, and should not be furthered in any way that would have even the appearance of compulsion. He was, however, exceedingly glad to take this opportunity of urging the claims of the fund upon the attention of the members, and he was quite sure he should not do so in vain. A box would be handed round to receive the contributions of the members, and the secretary would be happy to receive the names of any gentlemen who might be disposed to assist by an annual subscription. He called upon them to drink success to "The Benevolent Fund." (The toast was very warmly received, and a great number of gentlemen contributed to the fund, both as donors and annual subscribers.)

The Chairman said—The next toast was "The President Elect," and, as surgeons, they might well be proud of such a man as Mr. Hey. There was no talent which a surgeon ought to have that he did not possess, and enjoyed not merely an English but an European reputation. (The toast was responded to with very great applause.)

The Chairman.—In doing honor to the future they must not forget the past; and there were two gentlemen, now here, who had already presided over the meetings of the Association. He was sure they would receive their names with every demonstration of respect and regard, when he mentioned "Dr. Boisragon and Dr. Barlow, Vice-Presidents of the Association," whose healths he now asked them to drink with three times three. (The call was promptly responded to, and the toast was loudly cheered.)

Dr. Boisragon returned thanks, expressing his regret at the absence of many of his colleagues, who would have discharged the duty with more ability than himself. He heartily congratulated the members on the success which the Association had enjoyed, and paid a well-deserved compliment to Dr. Hastings, to whom that success was so mainly owing.

The Right Worshipful the Mayor of Exeter rose and said—He felt when their President had proposed the last toast, that there was one which ought to have preceded it. If he were not to add another word, but merely point towards the chair, they would readily understand his meaning, and would give to it an enthusiastic and spontaneous response. (Cheers.) Their election of Mr. James to the distinguished office of President of this Association spoke far more eloquently to his praise than anything which he could say. He would not enlarge upon his professional skill and ability, nor upon those qualities of heart and mind which endeared him to all who knew him, but would call upon them at once to drink the health of "The Chairman," with nine times nine. (The call was responded to in a way which unequivocally expressed the feelings of the meeting, and the cheering was repeatedly renewed.)

The Chairman briefly returned thanks, expressing his deep sense of the value and importance of the Association, and his anxiety to do whatever lay in his power to promote its objects. He regretted the absence of Dr. Blackall, who, had his state of health permitted, would undoubtedly have filled that distinguished position, in connection with the Association, which he now occupied. There were very few men, even in the metropolis, who were entitled to rank higher in the profession than Dr. Blackall, who had won for himself that which he so well deserved—the esteem and the love of all who had the advantage of knowing him. He would now beg to propose the health of "Dr. Blackall the Patron, Dr. Tuiller the President, and the South-Western Branch of this Association." (Cheers.)

Dr. Tuiller returned thanks, and expressed his regret at the little which he had hitherto done in furtherance of the objects of the Association. He was, however, fully convinced of its importance, and should endeavour to be more diligent in future.

The Chairman gave the health of "Dr. Black," which was warmly received, and acknowledged by that gentleman in suitable terms.

The Chairman next gave the managing committee, "Dr. Pennell, Dr. Shapter, and Mr. Pridham." They were much indebted to these gentlemen for their exertions in making arrangements for this meeting, and he was sure they would gladly show them this mark of respect. In reference to one of them, Dr. Shapter, they must remember not only what they had received, but what they had yet to expect. (The toast was loudly cheered.)

Dr. Pennell returned thanks, confessing that the members were but little indebted to him, the arrangements having been almost wholly made by Dr. Shapter and Mr. Pridham.

Dr. Shapter was loudly called for, and also briefly acknowledged the toast.

Mr. Turner gave the health of "The Ladies," and the proceedings of the anniversary terminated.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, AUGUST 20, 1842.

The account which we are enabled to give of the proceedings of the Provincial Association at the late anniversary will be found to contain much of general interest to the welfare of the profession. It is obvious from the harmony, and we might say unanimity, of opinion on most of the important subjects which came before the meeting, that a considerable advance has been made during the past year towards what we trust will ultimately terminate in a satisfactory settlement of those objects which for some time past have engaged the attention of the profession.

The views entertained on medical reform are more matured, and have assumed a more definite character; and while the expression of them is equally firm, it is divested of those ebullitions of hostile feeling towards established institutions which have been too evident in other quarters, and which we are persuaded have hitherto tended much to impede the progress of this important question. The remarks of the president for the year, Mr. James, on the necessity of providing a better and more uniform system of education and primary qualification, of guarding against the irregular practices of ignorant and empirical pretenders, and of giving to the general practitioners that voice in the management of their own branch of the profession to which they are every way entitled, are equally distinguished by sound judgment and candour toward those who may differ from him in sentiment.

Another subject upon which there has been throughout but one opinion, and upon which, consequently, decided steps towards better and more equitable arrangements have been already taken, is the medical relief of the sick poor. The alterations lately conceded in this department, however they may fall short of what is required to place the arrangements for medical attendance on the poor on the best footing, are yet decided improvements. They are the more important, also, as recognising principles which contain the germ of further good, and which, when extended and properly carried out, will, we trust, be found materially to benefit those for whose advantage every provision of this nature ought to be mainly intended. It is the sick poor who are to receive medical relief at the expense of the community, and while public humanity requires that this shall be administered in the most effective manner practicable, public justice equally requires that no injury shall be inflicted upon that class of society through whose immediate instrumentality alone the end proposed can be attained. We cannot doubt that what has hitherto been accomplished in informing the minds of those in authority in giving enlargement to their views, and in making them acquainted with the bearings of the many provisions necessary to ensure a beneficial practical working of their arrangements is, in great part, to be ascribed to the energy and intelligence of the poor-law committee of the Provincial Association. The publications which have emanated from this committee are most valuable documents. They fully expose the manifold errors into which the poor-law commissioners were betrayed in their original attempts at establishing a system of medical arrangements for the cure of the sick poor, and have contributed much towards compelling the commissioners to retrace their steps, and to adopt other arrangements more beneficial to the poor, and in some respects less degrading, if not more equitable, to the medical practitioner who is disposed to accept office under them. The further changes necessary to give full effect to what has been forced upon the commission through the activity and zeal of the Provincial and other medical associations, we propose to consider on another occasion, contenting ourselves for the present with merely directing attention to the communication laid before the meeting by Dr. Black, on the very inadequate scale of remuneration still persisted in.

On the question which has recently been under discussion, with respect to the remuneration of medical practitioners by the life assurance offices, for statements and opinions required by those establishments previous to effecting proposed assurances, whatever may be the views entertained by individuals upon the point at issue, it cannot be questioned but that the meeting acted wisely in abstaining from coming to a premature and hasty decision. It was the first time that the subject had come before the Association, and to pronounce either for or against the practice now followed by the offices, when it was sufficiently evident that much difference of opinion existed, could only have had the effect of lessening the weight of the Association instead of giving influence to the views of either party. In all questions on which the voice of the Association is to be given upon matters not immediately connected with the management of its own internal affairs, the expression of opinion to be influential must be decided. It should also be unanimous or at least the majority should be very considerable, to carry with it the weight and influence of the large and intelligent body of which the Association consists. A mere nominal majority indicates weakness and division rather than strength, and is really in such cases more favorable to the adverse party than to that the views of which it may apparently confirm. That the medical practitioner undertakes a high responsibility in giving an opinion, in cases of life assurance, is evident—that he is exposed, also, to the risk of giving offence to his patients and friends is equally clear. He further entails upon himself the liability

of being called upon at some future period to support his opinion, under a perplexing and annoying cross-examination, in a court of law, conducted by a well feed advocate, skilled, it may be, to make the worse appear the better part, often retained for that very purpose, and whose aim and boast it is to place the member of a rival profession in a false and degrading position. Upon what grounds, then, can it for one moment be questioned that the medical practitioner is entitled to receive adequate remuneration for any statements or opinions he may be induced under such circumstances to advance. The only question is, whether he is to look for that remuneration from his patient, whom he may seriously offend by giving a conscientious statement, or from the office, which benefits by the integrity with which he acts, and by the intelligence which he manifests in complying with their requirements. Until, however, the Association is prepared to give a decided and influential opinion on this point, it is better that the example of the Exeter meeting should be followed. When the question shall have been fully discussed, and something like unanimity on one or other side attained, then the voice of the Association will be expressed with authority, and will, we doubt not, prove influential with its members generally, in inducing them to follow up in practice the line of conduct so marked.

We can scarcely close these observations without expressing our gratification at the successful result of this meeting, and at the high character which the Association continues to maintain throughout the provinces. Remotely situated as Exeter is from the districts in which the operations of the Association have hitherto been chiefly carried on, it might have been supposed that some falling off in the attendance of its friends—some diminution in the assembled numbers—would have been experienced; but we find that no such falling off—no such diminution—was perceptible. The Exeter meeting, like the meetings held on former anniversaries, and in more central, and therefore more accessible, places, has contributed its full share in carrying forward the Association on the full tide of prosperity, and in giving effect to those objects for which this noble institution was originally formed. In the opinion of some of its oldest and firmest friends the Association has derived increased stability from its late sojourn in this capital of the far west, and has acquired an increase of influence from the support which it has there received. The numerous and highly respectable requisition for the next meeting, and the connection which the Association acquires at Leeds with the illustrious name of Hey, afford prospects equally bright for the future; and most sincerely do we trust that the usefulness, which has hitherto marked the honorable career of the Association, will continue to characterise all its proceedings, and to gain for those who may have the management of its extended concerns the approbation of the many wise and eminent men who are enrolled among its ranks.

UNIVERSITY OF EDINBURGH.

After an uninterrupted service of forty-four years, Dr. Home has resigned the chair of practice of physic in the University of Edinburgh. Dr. Alison has been unanimously chosen by the town-council to fill his place. The chair of theory of medicine, thus vacant, will be filled by election on the 20th of September next. On retiring from his professorship, Dr. Home stipulated for an annuity of £300 per annum; one half of this sum is to be taken from the professor of the practice of physic; the other half from the professor of the theory of physic.

The chair of pathology, vacant by the resignation of Dr. Thomson, has been filled by the election of Dr. Henderson. The candidates were Dr. Cragie, Dr. Handyside, and Dr. Henderson. On the first ballot, Dr. Cragie obtained 12 votes; Dr. Henderson 11; and Dr. Handyside 10. The name of the latter gentleman was then struck off the roll and a new ballot taken, when Dr. Henderson obtained 17 votes, and Dr. Craigie 16. The rejection of so distinguished a pathologist as Dr. Cragie appeared to excite considerable discontent amongst many members of the council.

EXPERIMENTAL AND PRACTICAL RESEARCHES ON THE NATURE AND ORIGIN OF TUBERCLES IN THE LUNGS.*

By William Addison, Esq., F.L.S., Malvern.

The author commences by saying that blood corpuscles examined by the microscope exhibit the appearance of two circles, one within the other. When the corpuscles are crowded together, they become elongated or compressed into a variety of shapes, and the outline of the inner circle is quite as much altered by pressure as that of the outer; but the matter or substance within the inner circle is never seen to mingle with that of the outer one, and when the pressure is removed, both circles regain their pristine form; hence, blood corpuscles consist of two soft elastic vesicles—the one being central within the other—and they possess the following structure:—

1. A highly elastic tunic, forming the outer and larger vesicle.

2. A similar tunic, forming the inner and smaller vesicle.

3. A coloring matter which fills the outer vesicle, occupying the space between the two tunics; and

*Abstract of a paper read at the anniversary meeting of the Provincial Association, August 3, 1842.

4. A peculiar, organisable colorless mater filling the inner vesicle.

In all classes of beings, the blood corpuscles—as far as the author's experience extends—have the same kind of structure. In every drop of human blood, and in that of other mammalia, however minute, there are two very distinct kinds of corpuscles—the one red, the other colorless—and they may always be discriminated, without the application of any extraneous substance, by the following experiment:—

A spot of recent blood, just withdrawn by a puncture at the back of the hand, was pressed into a very thin film between two slips of glass, the surfaces of which fitted evenly on each other, and examined by the microscope. During the examination, the glasses were frequently pressed together gently with the point of a finger, so as to put the corpuscles in motion; by these means the eye was directed to several remarkable corpuscles, which appeared harder or of a firmer structure than the rest; for the softer corpuscles, urged by the gentle motions given to the glass, passed to and fro around them, losing their figure. The softer corpuscles adhered together in rows; but these had no such disposition.

The corpuscles thus discriminated were generally found to be larger than the others,—the inner vesicle was larger, and numerous minute dark points, or molecules, were distinctly visible within it. By gently altering the focus of the microscope to and fro, they presented a peculiar and characteristic pearly aspect, and exhibited refractions of the light, which could not be produced by the same means in the softer corpuscles. These are the colorless corpuscles of the blood.*

By repeating the foregoing experiment with blood just drawn from any inflamed surface—as a pimple or the base of a boil—they are found very abundantly, and in blood taken from the skin of a patient in scarlet fever they are remarkably numerous and conspicuous.

It is impossible to form an accurate estimate of the depth or tone of the color of the red corpuscles, viewed singly as microscopic objects; hence the distinctive character of the colorless blood corpuscle, seen in this way, does not arise so much from any striking or obvious difference of color as it does from its greater resistance to pressure—from the greater relative size of the inner vesicle—from the dark points or molecules visible within it—and from the peculiar manner in which it refracts the light.

The author remarks, that a black spot on a white ground, having a diameter of only $\frac{1}{300}$ of an inch, is distinctly visible to a person with a good sight when held at the shortest distance for distinct vision. There are objects, not only in the blood, but in all organised tissues, visible as similar black points, when magnified 250 diameters; hence, their actual measure cannot be greater than $\frac{1}{100000}$ of an inch; to these objects he applies the term molecules. There are, he says, other objects in the blood and in all organised tissues, which, with the same magnifying power, are visible as bright pellucid points bounded by a strongly defined dark circle; these he calls granules—terms having no reference whatever to the actual nature of the objects. Molecules become granules, granules form vesicles or corpuscles, and vesicles become cells. The mean diameter of the human blood corpuscle may be taken at $\frac{1}{2800}$ of an inch, and it takes four or five granules to reach across the diameter of a corpuscle; hence, the measure of a granule cannot be greater than from $\frac{1}{11000}$ to $\frac{1}{15000}$ of an inch. Granules, however, vary considerably in size, and no precise measurement can be adapted to them. Molecules are the same objects, called by Dr. Martin Barry, in his memoirs on the corpuscles of the blood,* "dark objects," "dark globules," and "foundations of new cells." Granules are synonymous with the "discs" of the same author.

After noticing the various appearances presented by the red corpuscles, and having stated that the colorless corpuscles are most readily obtained for microscopical examination from the buffy coat of inflammatory blood before it coagulates, the author remarks that the elements of the blood visible by the microscope, without any manipulation, are—

1st, The red corpuscles; 2nd, the colorless corpuscles; 3rd, molecules and granules in the interior of the colorless corpuscles; 4th, similar molecules and granules isolated in the liquor sanguinis, and independent of the corpuscles; 5th, the fibrine, which may be seen by the microscope coagulating in the form of delicate cylindrical fibres, having a diameter even less than that of the molecules.

The fibrine does not form globules or corpuscles of any kind. Molecules, granules, and colorless corpuscles, enveloped in a dense net-work of fibrinous fibres or filaments, with variable quantities of entangled serum form the entire mass of the buffy coat of the blood.

The paper then relates at considerable length the effects of water, the dilute acetic acid, and the liquor potassæ upon the red and colorless corpuscles of the blood, and on pus corpuscles.

The effects of water on the red corpuscles varies exceedingly in different experiments, apparently with the length of time the corpuscles have been taken from the vessels, and with the proportions in which the water is applied. It sometimes renders the corpuscles smaller—one half their previous size—without dissolving or rupturing any of their structures; or it dissolves the outer tunic, disperses the coloring matter, and leaves the inner vesicle faintly visible. Sometimes the corpuscles imbibe the water, especially if a little gum be previously dissolved in it, and they grow very large by imbibition. The colorless corpuscles do not experience any sudden change on the addition of water, but they slowly imbibe the fluid; the molecules and granules in their interior become more and more distinct, and at the end of an hour or two the corpuscles, after swelling considerably, burst open and discharge their contents.

The effect of the dilute acetic acid on the blood corpuscles is similar to that of water; it acts more energetically; frequently after the application of the acid the outer vesicle of the red corpuscles is rendered very faint, but not destroyed—the color disappears, but the corpuscle retains its circular figure—it is much enlarged by imbibition, and the inner vesicle is very distinct.† The

*"London Medical Gazette," December, 1840, January, 1841, and April, 1842.

* Philosophical Transactions for 1841, and 1842.

† These experiments corroborate the result of those of Dr. Rees and Mr. Lane.—Guy's Hospital Reports.

colorless corpuscles imbibe the dilute acid, and molecules and granules may be seen within them in motion. After a few hours, or sooner, the corpuscles burst, and discharge their contents.

The phenomena displayed on the addition of liquor potassæ (Brandish's alkali) to the blood corpuscles are very remarkable; the first effects of the fluid are very rapid and energetic; after a short time, by following the directions given in the paper, the alkali may be observed slowly diffusing itself among the corpuscles. The red corpuscles may be seen to explode and disappear instantaneously, or to burst open gradually, and discharge their contents, and many singular changes of form may be witnessed. The colorless corpuscles may be completely and slowly dissected by a proper application of the liquor potassæ—all the stages of the process and the number and nature of their contents may be readily seen by the microscope. For this purpose, a drop of the liquor sanguinis from the surface of buffy blood is removed by the point of the finger, and transferred to a slip of glass, previous to coagulation; it should be spread out a little on the glass, and the liquor potassæ cautiously added from the point of a penknife or a lancet, while the corpuscles, without any covering, are under examination. This manipulation, with a little practice, may be readily accomplished with one of the small, upright French microscopes, and by moving the slip of glass gradually forward, the progress of the alkali may be watched for some time. Rapid changes take place; molecules and granules are developed in the interior of the cor-corpuscles, which enlarge by imbibition, and then dehisce or explode, the molecules and granules pouring out of them in great numbers; if the alkali be acting weakly, the molecules swell to granules, and the granules enlarge previous to their final disappearance by dissolution in the liquid.

A remarkable alteration may be sometimes witnessed in the corpuscles, which throws some light on their future development into cells or granulated vesicles; they give a sudden jerk, and at the same instant enlarge to twice or three times their former dimensions, without losing their circular outline. The molecules and granules in their interior are more widely separated from each other, but not dispersed; they are seen within the enlarged corpuscle connected together by delicate filaments; the corpuscles in this state exactly resemble, in structure and appearance, the cells of many vegetable tissues. The isolated or independent molecules and granules visible by the microscope, in the buffy coat of the blood before coagulation, are similarly acted on by the liquor potassæ—they become greatly agitated when the alkali reaches them, enlarge by imbibition, and ultimately disappear.

Pus corpuscles differ in no respect from the colorless blood corpuscles, except only as they are altered in size and appearance by exhaling their own contents or by imbibing the fluids with which they are associated. Water and the dilute acetic acid cause them to enlarge, developing the molecules and granules in their interior. The effects of the liquor potassæ upon them are very singular and instructive. On the application of this liquid the corpuscles immediately begin to enlarge by imbibition; a great number of granules become exceedingly conspicuous within them; finally, they burst open or explode, and the granules are dispersed around.

Several cases and experiments are minutely detailed in corroboration of the foregoing statements, from which the two following are selected:—

Case V.—*Shingles.*—One of the clear transparent vesicles was opened with the point of a lancet, and a great number of colorless blood corpuscles was found by the microscope in the fluid. Many of them exactly resembled the corpuscles in the blood; others appeared a little shrivelled, and a few were remarkably large. All of them contained molecules; the large ones had several bright granules, which, on close inspection, were evidently moving within them—that is, the granules disappeared in one part of the corpuscle, and became visible in another. This was repeated several times during the observation, apparently from the working ("*writhing*") or undulation of a fluid, which, by alternately dividing and coalescing, and then again dividing, formed the granules, which were sometimes visible at one spot, and then at another. The author has seen similar phenomena in the inner vesicle of the red corpuscles after the addition of a drop of gum water.

A little water was now added to the corpuscles from the point of a lancet; after a few minutes the shrivelled corpuscles became quite plump. Liquor potassæ was afterwards added very cautiously in the same way, and the corpuscles, one after another, dehisced. At first they gave a sudden jerk, and enlarged to twice or three times their former dimensions, displaying the granules in their interior; and then they burst open by a kind of explosion, each corpuscle discharging about twelve large granules, which were gradually dissolved.

Case.—*Troublesome Catarrh* (*Hay-fever*).—Copious discharge of clear transparent fluid from the nostrils; a perfectly limpid drop of the mucus was examined by the microscope, and I was somewhat surprised to find in it a great number of colorless corpuscles, resembling the colorless corpuscles of the blood. There were, indeed, corpuscles of all sorts, forming a complete series, with gradual transitions, from the colorless blood corpuscles through all the forms and varieties of pus corpuscles, up to large, round, granulated corpuscles and epithelium cylinders. My astonishment was great when I found most of these corpuscles provided with vibratile cilia in the most active state, so that some of the corpuscles were actually moving about by their means; and not only were the cilia in motion, but the molecules and granules in the interior of the corpuscles were in a very active state; they could be seen rapidly shifting their position within the corpuscles.

I examined no less than six different specimens of the mucus from the same individual, and I always saw a series of similar objects.

Case VII.—*Cancer of the Breast* (existing some years).—Arm œdematous; the back of the hand had been punctured some weeks ago to relieve the swelling, and a serous fluid has been discharged from it ever since. The author frequently examined this fluid by the microscope, and always found in it a fibrinous coagulum, and corpuscles resembling in every particular the colorless corpuscles of the blood, somewhat altered by shrivelling. When the arm was cool

and free from pain, the fluid discharged was perfectly limpid, as colorless as spring water, but corpuscles were found in it; and after standing ten or twelve hours, a delicate but almost invisible net-work of fibrine could be drawn out of it with the point of a needle. Sometimes the arm, without any obvious cause, became much more red, swollen, and painful, and then the discharged fluid had the appearance of ordinary serum; the number of corpuscles was much increased, and the coagulum was more dense. On the addition of water the corpuscles swelled out and enlarged; with liquor potassæ they burst open, discharging large granules. From the result of this and other experiments, it is evident that the serous fluids effused in dropsies differ from the serum after venesection; they contain fibrine and corpuscles. The fluid at the surface of inflammatory blood is the liquor sanguinis, highly charged with molecules, granules, and colorless corpuscles; it is a strong solution of fibrine. The limpid fluids discharged by œdematous swellings are of a precisely similar nature, with a less quantity of fibrine and a less number of corpuscles; the varieties of coagulable lymph are intermediate between the two extremes.

The conclusions which the author draws from his observations and experiments are,—

1. The blood at all times contains two very distinct kinds of corpuscle, the red and the colorless.

The red corpuscles are in progressive stages of development, during which they gradually lose color, the inner vesicle increasing in size at the expense of the coloring matter of the outer one, the colorless corpuscle being the mature inner vesicle (or, as it is termed, the nucleus) of the red corpuscle.

[It is here remarked, that the nucleus is the nutrimental organ of the wall or membrane of a cell, and that the inner vesicle of a blood corpuscule is not a nucleus.]

2. Blood corpuscles possess the function of imbibition, and have the power of choosing or selecting the elements they imbibe, and consequently the power of separating what they require from the materials by which they are surrounded, and of re-combining the imbibed elements to form new products. By the exercise of these functions on the atmosphere, during their passage through the lungs, the red corpuscles change their color, and exhale those elements which are not required, or would be useless in their greater circulation through the body.

3. All abnormal discharges, and all the varieties of serum and coagulable lymph, are modifications of the liquor sanguinis — stronger or weaker solutions of fibrine. All the varieties of pus and lymph corpuscles are more or less altered colorless blood corpuscles—altered either by imbibing and growing larger, or by exhaling, shrivelling, and becoming less. In fact, all abnormal products are effusions, and not secretions.

In order to illustrate and confirm the doctrine contained in the last of these conclusions, the author details several observations on the inflamed web of the frog's foot, from which it appears that the corpuscles, called "lymph globules," well known to all microscopical observers, accumulate in a very singular manner, and to an extraordinary amount, in the inflamed vessels. In many of these vessels they were so numerously congregated, that the whole interior seemed to be lined with them. The current of the red corpuscles passed by them, keeping in the centre of the vessels, and leaving a well-marked interval between the red current in the centre and t e boundary of the vessels, which was entirely occupied by "lymph globules."

A great many of these lymph globules or corpuscles are stated to have been seen exterior to the line marking the outline of the vessels, and several similar corpuscles were distributed on the intervening tissue. These results of inflammation were observed not in one only, but in all the experiments. The stimulant chiefly used was water, varying in temperature from 95° to 110°. The phenomena, witnessed by the author, appeared to him to corroborate the opinion already entertained by some very distinguished anatomists and physiologists, that the minute capillary distributions of the blood run in channels in the tissue, and that there are no membranous tubular coats separating the currents of the blood from the structure. The slightest violence or injury immediately determines the colorless corpuscles to the part, which arrange themselves along the outline or boundary of the channel.

Experiments were made on the blood corpuscles of the frog, in order to determine the nature of the "lymph globule." Water, the dilute acetic acid, and especially the liquor potassæ, were used for this purpose, and the effects produced are described in the paper. The author infers from them that the "lymph globule" of the frog is the colorless blood corpuscle, or the mature inner vesicle of the red corpuscle. It discharges, under the influence of liquor potassæ, a great multitude (at least fifty) of molecules and granules. The essential character of "vital turgescence" (the "modelling process" of Macartney) is a normal accumulation of the colorless blood corpuscles; for the purposes of growth, nutrition, or reparation, and where there is an active and extensive "vital turgescence," the blood indicates it, as in pregnancy. Inflammation is an abnormal and more or less excessive "vital turgescence," and the colorless corpuscles in excess form pus corpuscles.

The cells of vegetable tissue, the colored cells in the petals of various flowers, the structure of the pollen grain and of the polygastric animalcules, are minutely examined and described. Cells have the following structure:—

1. A transparent membrane, forming the cell wall.
2. The nucleus, or nutrimental organ of the cell wall, and usually attached to it.
3. Molecules and granules, of various sizes, within the cell.
4. Molecules and granules within the nucleus.

The size of the cell, the thickness of its wall, and the development of the nucleus, have no especial reference to the peculiar sensible qualities of the matter secreted by the cell. In the cultivated fruits—the cherry and the strawberry—the cells are inordinately enlarged, their walls thick, and the nucleus (with its molecules and granules) attached to the wall, is very conspicuous; but the fluid distending the cells is much blander than in the natural condition of these fruits, and comparatively tasteless. The granules of the cells are small and inconspicuous. But, on the other hand, the granules of the cell have a develop-

ment corresponding with the peculiar sensible qualities of the secretion, of which the fleshy leaves of sedum acre afford excellent examples. This plant flourishes on the bare rock, exposed to a burning sun; yet the leaves are very juicy (evincing an activity of function), and have very strong sensible qualities. The membrane or wall of the cells is thin, the nucleus indistinct, but the granules of the cell are very numerous and large.

In a parti-colored petal, each cell may be seen to possess its own color, without any intermixture with that of the adjoining ones. Cells with a purple or red pigment are found in juxta-position with others of a brilliant yellow, and these are intermingled with cells devoid of color. In the secreting vesicles of the liver the wall is thin, and so extremely tender that it will hardly bear any examination. There is no apparent nucleus, but the molecules and granules within the vesicle are numerous and conspicuous.

The foregoing experiments (here briefly stated) are brought forward to strengthen the conclusion which it is the author's object to establish—viz., that all secretions take place in the interior of granulated vesicles or cells, not by transudation from one tube (a blood vessel) into another (a duct); consequently that "tubercles in the lungs," "tubercular infiltrations," "hepatisation," and "pus," are not secreted products, but simply the elements of the blood effused by an excessive "vital turgescence" (or inflammatory action), having their peculiar characters determined by the texture and function of the structure, and by the amount or activity of the turgescence.*

A singular fact is stated with regard to the animalcules; it may be witnessed in all of them by the application of liquor potassæ (which the author calls his dissecting fluid). It penetrates the transparent tunic composing the body of the animalcule, by imbibition, and soon causes it to burst open or explode, precisely in the same way as the colorless blood or pus corpuscle; and the so-called stomachs of the creature are forcibly discharged, or thrown out one after another, thus becoming objects for minute microscopical scrutiny. The stomachs (?) swell and burst in like manner, precisely as the granules discharged from the lymph corpuscles of the frog, or from the pus corpuscle. These stomachs the author believes to be granulated vesicles, performing their functions by imbibition, and not by assimilating or digesting food, voluntarily taken. The vital powers of the annimalcules are totally inefficient in opposing the imbibition of the poison, and their stomachs may be seen enlarging in the interior of the body prior to the rupture of the integument.

The paper (which will be published in the forthcoming volume of the "Transactions" of the Association) concludes with researches on the nature of tubercles of the lungs.

* The author refers to Mr. Goodsir's paper, and corroborates his opinion with respect to secretion.

STAMMERING.

An operation for the cure of stammering by M. Velpeau, recently terminated fatally, in consequence of purulent absorption. We believe that the operation has long since been abandoned by M. Dieffenbach.

ON THE

EFFICACY OF INDIAN HEMP

IN

SOME CONVULSIVE DISORDERS.

By W. Ley, M.R.C.S., London.

[Read at the Exeter Meeting of the Provincial Medical and Surgical Association.]

The "British and Foreign Review" for July, 1840, notices a pamphlet by Dr. O'Shaughnessy, professor of chemistry in the Medical College, Calcutta, in which he strongly recommends the use of the resin of the garden hemp as a narcotic and antispasmodic. As the pamphlet is not to be had in this country, I can only refer to the accounts given of it in our reviews.

His success in relieving the spasms in tetanus and hydrophobia, although he was not successful in the cure of his patients, made me very desirous of using the remedy for the relief of the patient, whose history I will now detail.

A lady had some years previously received a shock and a blow by falling backwards on a tree, supposing that she was sitting down on a chair or stool behind her. The immediate consequences were not very severe, but after months of ill health, she was considered to have spinal disease, and at the time I speak of, had been confined to Dr. Arnott's hydrostatic bed about five years. This confinement was attended with much suffering, as the Indian-rubber sheet, which covers the water, will not last more than six or eight months, and the patient must be moved to another bed. The motion from one bed to another produces great pain, which shoots up the spine, and is followed usually at night by spasms of the muscles of the back; the latter are so violent as to draw the body into the form of an arch; this spasm continuing about a minute, is followed by a relaxation of the muscles, so that the patient cannot raise her head, and an expiration broken by sobs, and cough with a sense of choking, ensues; the shooting pains in the back continue, with intermissions of a few seconds only, and with intervals of from two to three minutes the spasms return, and continue for a period of seven or eight hours, until the severity of exhaustion seems to produce a sleep, broken by occasional spasm, and the continued shooting pain in the back. A day of exhaustion nearly amounting to unconsciousness, with faintness, cough, sickness, and the constant aching pain in the muscles of the neck and back, produced by straining from spasms, and maintaining the sensation of choking, is followed by a return of the spasms at night.

I ordered a grain and a half of the extract of hemp every half hour; after the fifth dose my patient felt the effects powerfully; she complained that she was sure she had taken too much; the muscles became relaxed, and she fell into a tranquil, but overpowering sleep of ten hours' duration; she then awoke with little exhaustion, little of the aching pain in the neck, and pleased beyond expression at the relief she had received; the shooting pains in the back, however, continued, and at night the spasms returned; still she feared to take as many pills as would produce any very decided effect; but her sufferings were much moderated, and the duration of the disease proportionally shortened; the spinal irritation had produced a contraction of the muscles of the left leg; the foot was

extended until the whole arch of the astragalus appeared to stretch the integuments anterior to the tibia, and the tendon of the tibialis anticus standing prominent like a tightened cord twisted the foot forcibly inwards. It had so much the appearance of being dislocated, that I thought it could never resume its natural position. When the attack had subsided, I examined the foot, and found it very much improved. There is now usually so little distortion, that I am convinced that would be rectified by a little exercise of the limb. As she still suffers under spinal irritation, the involuntary action of the muscles continues to give the foot the appearance of being considerably distorted at times. In two or three subsequent attacks she has taken the hemp with relief. She increases the dose at each attack, but it has not produced the decided effect which I have detailed. The effects which I should attribute to the remedy in this case are fright, relaxation of all the muscles, and narcotism, with especial relief to the muscles strained in the spasm.

A girl, twelve years of age, was attacked with that form of chorea which affects the body with rigid spasm. The countenance had an expression of idiotcy; she had lost the power of speech; the foot was thrown forward in walking with a jerk, and the toe was twisted inwards and forcibly backwards; in the same way the arm was extended with a jerk, and immediately the forearm rotated forcibly inwards with rigidity of all the extensors. I gave her half a grain of the extract three times a day; it produced little apparent benefit until the third day, when she was overwhelmed with fear, the muscles became relaxed, the power of speech returned, and at the end of a week or ten days the child was perfectly recovered, having taken no other medicine. My success in these cases induced me to try the effects of the hemp in many others. The relaxation of the muscles is remarkable in all, but it did not follow that the disease was much relieved in consequence. A man suffering from fits, and having probably disease of the brain, was seized during each fit with contraction of some muscle, which continued in that state until the next fit, perhaps five or six weeks. He came with his head drawn down to the shoulder; it had been fixed there some days. It was relieved by three grains of the extract. The man said that, although the distortion was relieved, he did not think it did his head any good at all, and refused to continue taking the medicine.

A gentleman, suffering from sciatica, took three grains of the extract at bedtime; in an hour he awoke and fancied that he was dying. The muscles were so much relaxed that he could scarcely move himself; but although he suffered great tenderness previously, he did not now know in which leg he was affected; he slept heavily for some hours; when that sleepiness wore off the sciatica returned, and he felt so little relief, while awake, that he would not repeat the medicine.

These cases have given me the most perfect confidence in the power of the remedy to produce relaxation of the muscles, heavy sleep, and during its action, abatement of pain.

The following cases tend to show that its influence has a wider range:—

A coachman had been breaking in a young horse, and by the great and constant strain on the arm, the muscles were swollen and hard, the arm so stiff that he could not bend it, or his hand grasp his razor; on the olecranon the bursa was as large as a small pot orange. I gave him, at four o'clock in the afternoon, three grains of the extract, and told him to call in three hours, that I might repeat the dose if necessary. He did not come until next morning; he then said that his arm had been so much better the night before, that he found he could do a little work, and he thought he had better do so; he had shaved himself that morning, and he thought his arm was as well as ever. I was surprised to find that the enlargement of the bursa had almost disappeared. He has repeated the dose on a similar occasion with the same effect. He has been a great drinker, and his hand usually shakes characteristically; he remarked, on the morning after the second dose, "I do not think my hand shakes as much as it used to."

A shipwright had a fall of twenty feet, and sprained both wrists very severely. After he had been treated in the usual way three months, and had been told that, after the active symptoms were reduced, little could be done for a sprain but supporting it, he came to me, saying that he had lost the grasp of his hand, and had not, therefore, the means of getting a living. His wrists were distended so much with fluid, both in the joint and under the flexor tendons, that I fear to give a description of what I did not take notes of at the time. I tried the extract, but I did not anticipate the result. He took a grain three times a day for three weeks; he then thought himself able to work, and I have not seen him since, although he had pills still to take. His wife tells me that she is sure that the left wrist, which was the worst, is reduced one-third in size, and I do not fear to repeat it, because, we have all need to make allowance for the eye when unassisted by a measure.

To a girl, aged fourteen, who had a ganglion as large as a nut on the back of the hand, I gave twelve pills, containing one grain of the extract in each, telling her to take one three times a day. In about a week she returned to me, saying, "I thought it better to show you, sir, how much better my hand is, for that place is almost gone." The only remains of the swelling was a puffiness, almost imperceptible. I must mention also a case of another character, tending to show benefit when combined with other treatment. A child, aged nine months, supposed to be teething, but having the crowing inspiration of infants, had been treated in the usual way for teething, and fits accompanying that condition; the child had had seven fits at various intervals. The parents watched it night and day, believing that each succeeding attack would carry it off. Whenever it awoke from sleep it was seized with a spasm which drew back the head, flushing of the face, stopping the breath until it was drawn in with the peculiar crowing inspiration; the spasm then relaxed, but the child was unable to resume the natural position of the head, apparently from the effect of the relaxation of the muscles. I gave it the sixth of a grain of the extract. It soon fell into a tranquil sleep, and on awaking had no spasmodic attack. The dose was continued three times daily for a week; although very much relieved, the child still had the crowing occasionally; I then thought fit to resume the

plan of regulating the bowels, but the mother did not return to me after this visit. After six weeks I sought her out, thinking that the child was dead. She said that, as soon as the bowels was cleared again, the child got quite well. The child appears to be in perfect health, although it has now at eleven months no tooth or appearance of any to the finger.

This case has induced persons to ask, "How does it effect the involuntary muscles?" Judging from what I have observed in persons sleeping under its influence, the inspirations are perfect, but I think slow; not having had my attention directed to the subject previously, I have not yet counted the number in the minute. It would not be quite fair to consider the muscles of the larynx and neck involuntary.

The effects popularly attributed to the medicine are—"inebriation of the most cheerful kind, causing the person to sing and dance, to eat food with great relish, and to seek aphrodisial enjoyments. In persons of a quarrelsome disposition, it occasions an exasperation of their natural tendency. The intoxication lasts about three hours, when sleep supervenes. No nausea or sickness of stomach succeeds, nor are the bowels affected; next day there is slight giddiness and vascularity of the eyes." After relating cases of rheumatism, hydrophobia, cholera, and tetanus, Dr. O'Shaughnessy says, "The preceding facts seem unequivocally to show that, when given boldly and in large doses, the resin of hemp is capable of arresting effectually the progress of this formidable disease (tetanus), and in a large proportion of cases of effecting a perfect cure," "and," adds the reviewer, "we are, moreover, after reviewing the whole evidence here submitted to us, willing to join with him in the belief," "that in hemp the profession has gained an *anti-convulsive remedy* of the greatest value." I think that the cases I have related will tend to confirm this opinion. I have little to add. I have followed in the track pointed out to me, and have detailed my success. I am confident that whoever adopts the remedy, will find an agent that he can use as an anti-convulsive of much more than ordinary certainty. What other effects may follow experience will teach. There is a discrepancy, which will be observed, between the effects I have noticed, and those attributed to it; in this, that where I have found a disposition to fright produced, popular opinion attributes pleasant inebriation to the drug they use for that purpose, and this opinion exists from Egypt and Arabia to Hindostan. Is it impossible that the different effect, produced on the natives of the colder climates, has been the cause of its never having been adopted by our countrymen in their intercourse with the natives of Egypt and India? Certainly, it is no part of their character to resist the pleasures of "inebriation of the most cheerful kind," &c. I have never used it to procure sleep simply, because of the unpleasant feeling of terror or distress produced. By referring to a work, of a much more popular character than professional works ever attain, the "Arabian Nights Entertainments" as translated by Mr. Lane, we find the medicine used under the name of "benj" and "hashsheesh." In the second and eleventh chapters, it is used by a faithless wife to overpower her husband, and by a robber to enforce sound sleep in the eunuchs. In a note, Mr. Lane tells us that the class of faithless wives still have the credit of using it. In chapter fifteen we find "a hashshash ("a person addicted to the intoxicating hemp, called hashsheesh and hash-sheeshch") introduced as a prominent character. Mr. Lane says, "The celebrated Von Hammer, who regards the benj as hyoscyamus, remarks, benj, the plural of which in coptic is nibenj, is, without doubt, the same plant as the 'nepenthe,' which has hitherto so much perplexed the commentators of Homer. Helen evidently brought the nepenthe from Egypt, and benj is there still reputed to possess all the wonderful qualities which Homer attributes to it." —thus translated by Gilbert Wakefield:—

> "Bright Helen mixed a care composing bowl;
> That juice oblivious every ill could 'swage,
> And cool the bosom of tumultuous rage.
> * * * * * *
> Though sire or mother dead before him lay;
> Though his own eye had seen the life blood run
> From a dear brother, or a dearer son."

These references to the literary history of the medicine are more interesting than satisfactory; the virtues are rather rich in the imagination than precise in botanic indentity, or medicinal efficacy. Dr. Christison, in his dispensatory published this year, at Edinburgh, mentions benj as one of the oriental terms for *opium*. In this he must be mistaken. Mr. Lane, who claims credit for his translation, from his long residence at Cairo, and knowledge of Egypt, says, "The name of benj or beng is now, and I believe generally, given to *henbane*, but El-Kasweenee states, that the leaves of the garden hemp are the benj, which, when eaten, disorders the reason. This is an important confirmation of De Lacey's opinion respecting the derivation of the appellation of the 'assassins' from hashshasheen (hemp-eaters) as the sect which we call assassins are expressly said by the Arabs to have made frequent use of benj." Dr. O'Shaughnessy prepared his extract from the hemp grown by the natives of India for their own preparations. It seems impossible, therefore, that he could be mistaken. The preparation which I use was made from the dry hemp imported into this country; some portion of it I have made myself.

RENAL ABSCESS.

Dr. Williamson, of Leith, has published the details of a case of lumbar abscess, which he diagnosed during life, as being probably connected with the kidney. On examination of the body after death, the right kidney was found to be large and flabby, of a stone color externally, and displaying a granular deposit of a similar color within, the papillary bodies being very small. The sigmoid flexure of the colon adhered closely to the parietes of the abdomen on the left side. The left kidney was of very large size, covered with a fine fibrous capsule, closely adherent to the posterior surface of the abdomen, and distended with purulent matter. On a section being made, the only portions which bore any resemblance to the natural texture consisted of a thin layer around the expanded pelvis and calices, in which much pus was contained. In one of the latter, a large calculus was firmly impacted, which projected into the pelvis in two different directions. The calculus weighed two drachms, thirty-six grains, and was apparently composed of oxalate of lime. The opening, by which the abscess had burst externally, was traced to the posterior surface of the kidney, and apparently entered its pelvis. The ureter was much dilated, and the bladder contained a considerable quantity of purulent matter.—*London and Edinburgh Medical Journal, July.*

UNIVERSITY OF LONDON.

Candidates who Passed the First Examination in August, 1842.

First Division. — Hugh Bell, Guy's Hospital; Frederick James Brown, University College; Henry Browne, King's College; Joseph Hullett Browne, Guy's Hospital; William Thomas Edwards, University College; James Ellison, St. Bartholomew's Hospital; Robert Haines, St. Thomas's; Robert Dawson Harling, University College; Frederick Marshall, University College; William Henry Parsey, King's College; John Wilson Croker Pennell, Guy's Hospital; James Russell, King's College; Robert John Spitta, St. George's Hospital; Henry Sharp Taylor, University College; Richard Tudor, University College; Stephen Henry Ward, London Hospital; Henry March Webb, Guy's Hospital.

Second Division.—Henry Cannon, King's College; John Crutch, St. George's Hospital; Frederick Field, Birmingham Royal School of Medicine; John Cooper Forster, Guy's Hospital; Thomas Humphreys, University College; Frederick Robert Manson, King's College; Charles Henry Felix Routh, University College; Godwin William Timms, University College.

EXAMINATION FOR HONORS.

Candidates who Passed this Examination.

(Arranged in the order of Proficiency.)

Anatomy and Physiology.

Robert D. Harling (exhibition and gold medal), University College; William Thomas Edwards (gold medal), University College; Frederick James Brown, University College; William Henry Parsey, King's College; Henry March Webb, Guy's Hospital; Frederick Marshall, University College.

Chemistry.

Robert Haines (gold medal), St. Thomas's; William Thomas Edwards, University College; William Henry Parsey, King's College; Frederick Marshall, University College.

Materia Medica and Pharmaceutical Chemistry.

Henry March Webb (exhibition and gold medal), Guy's Hospital; William Thomas Edwards (gold medal), University College; Frederick Marshall, University College; Robert Haines, St. Thomas's.

NATIONAL VACCINE INSTITUTION.

A meeting of the medical board of this institution was held on the 9th ult., for the purpose of electing a successor to the late Mr. Gillham. The choice of the board fell upon Mr. Tomkins, vaccinator at the Surrey station. Mr. George Simpson, of Bedford, succeeds Mr. Tomkins.

PROMOTIONS AND APPOINTMENTS.

War-office, August 16.

Hospital Staff—Surgeon Charles Maclean, M.D., from the 53rd foot, to be staff-surgeon of the first class, vice Peter Smith, deceased.

NAVAL.

Assistant-surgeons—Alexander Barr, to the Comet; William Roberts, to the Alfred.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, August 12, 1842.

E. Wardley, G. Adams, W. P. Stiff, A. Lloyd, W. Skelding, T. Martin, F. Anderson, C. Miller, R. Irwin, J. Jennings, A. Furlong, J. Hewitt.

Monday, August 15, 1842.

C. Juckes, R. C. Russell, J. Richardson, W. O. Barker, T. W. Challinor, J. Briscoe, T. Taylor, F. J. M. Mosgrove, W. A. Sumner, J. B. Fletcher, G. Cronyn, W. A. James, R. Wilson, R. W. Moore.

APOTHECARIES' HALL.

Licentiates admitted Thursday, August 11, 1842.

J. B. Carlile, Hull; W. Stedman, Godalming; J. L. Sweet, Tiverton; F. G. Sadd.

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TO CORRESPONDENTS.

From the great length of our report of the meeting at Exeter, we have been compelled to defer the insertion of many papers and communications until next week.

The papers of *Mr. Squire, Mr. Swain, Mr. Higginbotham*, &c., have been received.

The letter from *Shrewsbury* has been received.

A. B.—We regret to say that it is impossible, with our utmost care, to prevent a Number being occasionally lost by the Post-office.

ERRATUM.

Page 377, col. 1, line 52, for "four drachms," read *four drops*.

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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And Retrospect of the Medical Sciences.

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THE DORTON CHALYBEATE SPA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—Having been often applied to by members of the profession and others for information relative to the Dorton Chalybeate Spa, I am induced to request the insertion of the following brief observations in your Journal, in addition to the information already incidentally communicated by Mr. Robert Ceely, of Aylesbury ("Transactions of the Provincial Medical and Surgical Association," vol. viii. and x.), and in my own popular account illustrated by a few cases of its efficacy, which the experience of the last five years has enabled me greatly to augment.

I am, Gentlemen,
Your obedient servant,
Thomas Knight.

Brill, Bucks, August 19th, 1842.

The Dorton Chalybeate spring takes its rise in a meadow situated in the parish of Dorton, in the county of Buckingham, and at the termination of a glen formed on the eastern side of Brill, one of a chain of hills opposite the Chilterns, as they range through the counties of Oxford and Bucks.

The course of the spring had been for years marked by the destruction it occasioned to vegetable life, and by its incrusting the blades of grass, as it were, with iron mail—depositing around them thick layers of the brown oxyde. On exploring the soil for its source at a depth of sixteen feet, it gave the following singular character: the more superficial part consisted of loose loam with quantities of shattered lime shells; beneath this were loose layers of an unctuous clay, friable, and studded with slender prisms of sulphate of lime; also a pale yellow powder of the smell and appearance of lac sulphuris, and large portions of oxyde of iron. These pyritic masses had a brown ochreous appearance, moist, and in such a state as easily to be acted on by the superabundance of acid; and the formation of the salt probably takes place instantaneously, as the water ascends through these highly charged substances. Nearly 100 gallons per diem are ascertained to be given out in the driest weather. The meadow to the extent of several acres gave this result, on its examination.

The following is the analysis of a pint of the water, by Mr. Brande:—

Carbonic acid, Nitrogen gas, Sulphuric acid, Silica	A trace.
Sulphate of lime	11.5
Muriate of soda	1.5
Sulphate of alumina	2
Sulphate of iron	10
Total	25 grains.

"It reddens vegetable blues from an excess of acid which amounts to about 0.8. The specific gravity at the temperature of 60° is 1004." The analysis taking place remote from the well, and at a distance of time, must account for traces only of the gases being detected; for the atmosphere over the well gives the strongest evidence of their existence to a considerable degree. On a temporary closure of the well, a body of gas collects sufficiently energetic to render black a polished silver spoon suspended over it. It has the property of slightly sparkling when first drawn, and its acid predominance gives it a somewhat agreeable taste.*

The topography of the hills bounding the spa, which at first sight impress one with the probability of their furnishing springs of this character, may be briefly noticed.

Although to the distant and uninformed observer they appear to be detachments or separations from the Chilterns, yet Brill and its duplicate, Muswell, are of a totally different formation—viz., the oolitic. The latter hill is 744 feet above the level of the sea, and affords a panoramic view of nine surrounding counties; the nearest boundary is marked by the horizon, interrupted only by the line of the Chilterns, twelve miles distant; its other scope commands a prospect of thirty miles. Their bulk consists chiefly of Portland limestones and Rimmerage tile clay—the quarries exposing distinct rocks, which vary in hardness and claim particular uses.

These pits offer a rich treat to the geological pilgrim; for the quantity of fossils, making up the great bulk, is judged to be 40 per cent. of the whole.

A late writer observes of these hills—"They are so remarkable that they cannot fail to excite the observation even of the most casual; for here we have in the varied alternations of sands, limestones, and clays, the most complete evidence of the repeated action of diluvial waters; and probably these hills and valleys, even now, very little varied in form since the period when the last deluge gradually receded from the land to its present level." Subjoined is a list of those fossils most abundant here:—The varieties of ammonites some 2½ feet in diameter, the trigonia clavilata, costata, nodosa; pheladomya, acute costata, æqualis, nautica, pecten, helix obtusa, a species of teredo nasalis, irochus, Venus' (varieties) guyphea, varieties of vertebræ and ribs of considerable dimensions, bones of Saurian reptiles, plesiosaurus, and ichthyosaurus. The oysters and mussels preserve a most perfect form, and

* Its chemical delicacy, as might be expected, is great; for the action of the air and the light, in bottling it, is sufficient to cause an early precipitation of the iron, and its passage along a leaden pipe quickly decomposes it. The linings to the well have been various in consequence. The one found least objectionable is of wood, now in use. In a few years the stout cast iron pipes, which carried off its waste waters, have been completely destroyed.

allow of being opened to show their complete casts within. Fossil wood is often met with in considerable blocks in the clays.

On the top of Brill Hill, thick beds of a bright yellow ochre also exist. On removing a thick bed of it a short time ago, a fine trunk of a fossil tree was exposed, and laid bare the whole length of the pit; its surface was completely covered with metal firmly attached, and though for a time it retained its silvery appearance and hardness, the oxygen of the air in a few weeks disclosed its frail nature, and resolved it into green crystals of sulphate of iron. The bed of green sand underneath this curiosity had great quantities of pyritic formations, in the shape of irregular balls weighing several ounces.

The highest point of Muswell Hill has a thick cap of the iron sands and iron sandstones. On its northern declination into the vale, another chalybeate spring obtains a vent, and is equally abundant in its supply with the Dorton. It contains less sulphate of iron, but a greater excess of acid, and the ground around it in dry weather has the appearance, by its whiteness, of a slight hoar frost, from the precipitation of the sulphate of alumina attending the constant evaporation. This is supposed to hold in solution six grains of iron in a pint; another (only mentioned, as it will show how prolific the neighbourhood is in these mineral springs) discharges itself in a field on the western suburbs of the hill bordering on the village of Oakley; this partakes of the same character as the others, but is more limited in its discharge. The interminable dark clay in this locality is interesting, as furnishing fine specimens of the pyritic ammonite, glistening in its substance with abundance of belemintes and oyster-shells of considerable magnitude.

The powerful medicinal properties of the Dorton spring have been long known and appreciated in the immediate neighbourhood; and several years of attentive observation of the effects of the water, internally and externally, in various disorders, have afforded the writer abundant testimony of their great value and importance.

Owing, however, to the purity of the air, and the dryness and exceeding salubrity of the place, but few cases have occurred among the inhabitants for a trial of its virtues. The case-book, therefore, mostly presents the names of strangers, many of whom, allured by the beauty of the scenery, have been tempted to prolong their visits here, and many more who have been brought by the increasing reputation of the waters from the remarkble cures they have already wrought. Mention need be made of only a few of the most striking cases, and the particular diseases in which the waters have proved most beneficial.

Among the more early cases presented for its trial were two obstinate ones of lepra. They had been of years' standing. Both of them occurred in females. One, in her hopelessness of relief, repaired hither on her dismissal from the Middlesex Hospital. She manifested, on commencing the water, an inflammatory disposition, and the treatment with the chalybeate was necessarily accompanied for a time with salines. The former was at length continued alone; a perfect cure was effected in the space of five or six weeks. Baths of a high temperature were at the same time employed.

Another case, that of a tradesman's wife, from Berks, much more wretched in its appearance, and obstinate in its character, had been treated by Dr. Furgusson, of Windsor. The erect position caused the thick scales, which were as bands round her legs, to crack, and from their deep fissures, considerable hæmorrhage at times took place, so that existence under such a continued affliction had constrained her to prefer death to life. The daily desquammations of skin were astonishing. In six weeks a cure followed the active treatment of the chalybeate; baths of 108° were likewise used. In impetigo, the success which has attended repeated trials of the spa, encourages sanguine expectation. Late in the last season a striking instance presented itself from the neighbourhood of Islington, in a person of a lady, a patient of Dr. Hope. The saline treatment also in this case preceded the use of the water, but it had been tried from the commencement as a lotion with gruel. The improvement was not manifest till its active exhibition had been continued for a month, when a rapid progress to ultimate convalescence ensued.

It is deserving of remark that, in all these cases, the water exerted a specific action on the kidneys, in exciting them to a healthy vigorous action.

In profuse menorrhagia its effects were signally marked in two cases. The disease in both had proceeded to a great extent, denying the individuals the most trifling exercise, their breathing becoming so embarrassed, with great loss of tone in the whole system. Though these had been of years' continuance, yet rapid was the progress each made to a state of convalescence. A pint daily was the quantity taken; more was often borne without inconvenience.

A female, aged forty-six, of lax fibre, and long the subject of periodical and profuse hæmorrhage from internal piles, attended with procidentia ani came from Aylesbury, five years ago, by the advice of Mr. R. Ceely, being then in a state of intense anæmia and advanced anasarca. In the course of five weeks, by the use of the water in the quantity of a wineglassfull *ter die*, a decided change for the better took place, and she returned to Aylesbury convalescent. Mr. Ceely informs me that this patient is now in excellent health, she having from an early period, like other members of her family, been subject to profuse and frequent hæmorrhage, whereas now the hæmorrhage is only occasional, and in so slight a degree as to produce little inconvenience and no interruption to health.

A young woman, aged 28, daughter of the abovementioned person, very debilitated by intense suffering from periodic and chronic periostitic neuralgia of the tibia, the sequel of intermittent fever, which had been preceded by a severe remittent, was sent at the same time by the same gentleman, who had subjected her to the most approved treatment for the neuralgic affection, with only temporary benefit. She took (for a period of five weeks) the waters in large doses, commencing with a wineglassful *ter die;* it was soon increased from half a pint to a pint and a half, or more, in the course of the day, with marked and permanent benefit. In neuralgic affections and in chorea several cases might be cited to authorise its use where the carbonas ferri had failed.

In chlorosis, a striking instance of its powers was shown two years ago. The young lady was from the

neighbourhood of Reading. Her emaciated, blanched appearance, increasing debility, &c., had filled her friends with the apprehensions of consumption (indeed, such was positively stated to have been the case); and in this apprehended hopelessness the celebrity of these waters reached their ears, and their peculiar adaptation quickly restored her.

The daughter of a clergyman was recommended hither by Dr. Robinson, of Northampton; she had been suffering from obstructive disease of the liver, and the active measures which had been found necessary had so reduced her strength, and given such a blow to her constitution, that it was for a long time a question whether she would again rally. This state of things continuing, with tympanitis of the whole abdomen, she was brought hither to have a fair trial of this chalybeate; and though for months previous the recumbent posture only could be endured, and was obliged to be maintained through her long journey hither, in a month she was enabled to bear horse exercise, and left perfectly restored at the end of two.

Glandular ulcers and sinuses, occurring in scrofula, receive a marked benefit by a liberal external and internal exhibition of this remedy. One of the earliest indications of its service is an increased appetite; but, like all our available resources for this disease, it requires a lengthened trial to fairly judge of it. Instances in the neighbourhood are not wanting, both in the male and female, of its lasting benefits in this disease, and in one where sea bathing had had a patient trial the season previous.

In bringing forward this chalybeate as a therapeutic agent, the writer begs to observe, that its stimulating powers and astringent properties would preclude its exhibition in subacute diseases, and also that these qualities will have to be instantly guarded against in such cases as admit of its use. The saline aperients ought, therefore, to accompany its trial, either by occasionally adding a sufficient dose, or simultaneously introducing a few crystals of such salts.* Where it is had recourse to for impaired digestive organs, from the loss of nervous energy, the decoct. aloes comp. has the preference, as tending to moderate the powers of the chalybeate. From the neglect of attention to this circumstance, patients have often been discouraged at its commencement, and the remedy, consequently, lost to them.

In directing the larger doses (a pint and a pint and a half per diem), it is necessary that the open air should be afforded, with or without exercise; for disagreeable headaches, and sometimes giddiness are the consequence of inattention to this. A water of this strength requires, of course, at its commencement, to be used in small doses, gradually increasing them to a perceptible influence.

For adynamic and chronic affections of the skin the bath has exerted a marked influence; and to obtain an early removal of the adherent scales and accumulation of scurf, an exceedingly high temperature has been often found necessary, and borne with but trifling inconvenience. In the use of the chalybeate bath, the warm water necessary to raise it to a proper degree of heat disengages the sulphuric acid, and precipitates the iron. The density of the water experienced in taking a bath gives it the buoyancy of sea water.

In order that the public may have the full benefit of the waters, the well has been enclosed, a neat pump-room erected, and some elegant baths conveniently arranged; to which is added an ample enclosure, laid out and shaded with shrubs of considerable growth, affording delightful promenades to the invalid, in addition to the natural scenery, which is engaging and extensive.

* Its ready absorption into the system renders a caution necessary, to avoid taking it near a full meal.

LITHOTOMY.

DIFFICULTY IN THE EXTRACTION OF THE CALCULUS FROM ITS PECULIAR FORM.

By W. J. SQUARE, Esq.

[Read at the Exeter Meeting of the Provincial Medical and Surgical Association.]

George Tregellis, aged eleven years, was admitted a patient into the South Devon and East Cornwall Hospital, on the 2nd of July, 1842. He is small in stature, and of delicate constitution. He has experienced the usual symptoms of stone in the bladder between three and four years. They have been very marked during the last few months; the pain he has suffered has been severe, and the act of micturition very frequent and painful. From constant pain, and want of rest at night, his constitution is now much impaired. The urine is copious, transparent, and naturally acid.

A sound passed into the bladder immediately strikes the stone, and the finger introduced within the rectum also detects it very readily. From these two circumstances I judge it to be of considerable size.

July 9. The patient being prepared in the usual manner, I performed the lateral operation of lithotomy, using Mr. Liston's staff and scalpel. Having reached the bladder, I passed my finger into its cavity, and immediately felt the stone; it was of large size, and placed transversely behind the pubis, the collapsed bladder grasping and detaining it in that position.

The forceps being introduced, and, touching the calculus, I expanded their blades, but was unable to seize it; the impression produced on my mind being, that I could not expand the blades of the forceps sufficiently wide to enclose the stone. Three or four minutes were expended in ineffectual efforts to grasp the calculus, when, having altered its position, I grasped and succeeded in extracting a moderate sized oval calculus. On reintroducing my finger within the cavity of the bladder, I discovered another stone, which I immediately removed. After the operation my little patient was very faint and cold, but soon rallied under the stimulant action of opium and ammonia.

Without entering minutely and unprofitably into the details of his progress towards cure, I may state that he was out of doors within a fortnight after the operation—that the urine now passes entirely through the urethra, and that the perineal wound has nearly cicatrised. He will be discharged from the hospital in a few days.

I have sent the two calculi for the inspection of the

members of the Association, and will subjoin a few brief remarks on the calculi, and the points of difficulty in their extraction.

The oval calculus, which was the first extracted, is composed of lithic acid, with a partial thin crust of phosphate of ammonia and magnesia. It weighs two drachms two scruples and five grains. The long calculus exhibits an external crust of phosphate of ammonia and magnesia, with a small quantity of phosphate of lime. It weighs two drachms and a half and three grains.

On examining the two calculi, a round convex surface will be found upon the oval one, which accurately adapts itself to a concave surface at the small extremity of the long calculus. The two calculi were, while in the bladder, one, and were broken into two parts by the forceps.

I entertain a strong opinion that the two calculi were at one time distinct in the bladder, and that they became cemented together while contained in that organ. This opinion is founded upon the peculiar shape and adaptation of the fractured surfaces, upon the different specific gravity of the calculi, and also upon their dissimilar chemical composition.

The difficulty experienced in grasping the stone arose from its very peculiar shape, its transverse position behind the pubis, and its being grasped by the muscular coat of the bladder.

I shall be obliged to any member of the Association, who is proficient in practical chemistry, who will furnish me with a more accurate analysis of the crusts of the two calculi than that which I have afforded.

The singular shape of the calculous concretion, and the difficulty experienced in its extraction, appear to me a sufficient apology for making this short and imperfect communication.

4, Cobourg-street, Plymouth,
August 2, 1842.

ON

THE ARREST OF HÆMORRHAGE AFTER THE EXTRACTION OF TEETH.

By J. Higginbottom, Esq., Surgeon, Nottingham.

[Read at the Exeter Meeting of the Provincial Medical and Surgical Association.]

The attention of the profession has of late been directed to the arresting of hæmorrhage after the extraction of teeth. I have seen the treatment successful in such cases by the employment of the well-known plan recommended by John Hunter in his work on the teeth—viz., "to stuff the socket with lint dipped in oil of turpentine, and to apply a compress of lint, or a piece of cork thicker than the bodies of the adjacent teeth, so that the teeth on the opposite jaw may keep up a pressure."

Several years ago I attended a case, with the late Dr. Blake, of Nottingham, when the above plan was not available. The patient had two teeth extracted from the lower jaw, adjoining each other; and, from the irregularity of the adjacent teeth, no pressure could be made with a compress and cork. The patient also had lost the opposite teeth on the upper jaw, which made the case still more difficult to manage.

Numerous applications and styptics were had recourse to in vain, and no plan appeared likely to suppress the hæmorrhage except pressure. This might have, perhaps, been effected by the finger and thumb, the index finger pressing upon the compress on the bleeding socket, with the thumb placed on the inferior margin of the lower jaw; but this pressure would have to be continued for some days. The following simple contrivance was used, which answered every purpose in arresting the hæmorrhage:—Two pieces of wood about five or six inches long, one two inches in breadth, was placed under the lower jaw, and the other, one half that breadth, was placed on a compress of lint upon the bleeding socket. These two pieces of wood were connected half an inch from the end by a piece of wood, an inch and a half square, acting as a fulcrum. Notches were made in the wood a quarter of an inch from the end, to secure the two pieces of wood by a ligature, and other notches were cut on the middle of the same for another ligature, for the purpose of increasing or diminishing the pressure on the compress of lint upon the bleeding socket. The pressure by this rude instrument was continued, occasionally tightening the ligature, for three days, when it was removed, leaving the compress of lint, which came away in two days more, and there was no return of hæmorrhage. I have given a minute description of the instrument, as it answered every purpose in arresting the hæmorrhage, yet it was attended with considerable inconvenience from the necessary pressure, caused by the compress resting upon the submaxillary muscles, which prevented the patient from swallowing even any liquid without great pain and difficulty.

From the success of the above case, I was led to think that an instrument of the form of a pair of open spring forceps, with a screw, to increase or diminish the extension of the instrument, would answer the purpose of suppressing the hæmorrhage. I directed Mr. J. Thompson, surgical instrument maker, of Nottingham, a very clever and ingenious mechanic, to make me such an instrument as I have described. He made it with a screw placed near the end, to increase or diminish the pressure; at the extremity of each blade a pad, lined with Indian-rubber, was fixed on a movable screw, and so formed as to be nicely adapted to the inferior margin of the lower jaw; the other, a smaller pad, made of the same material, for the purpose of pressing upon a compress of lint placed on the bleeding socket. The instrument, which might be denominated the "alveolar tourniquet," is little more than three inches in length, can be fixed upon any part of the socket, and the under pad may be adapted to any part of the inferior margin of the lower jaw, and the pressure can be increased or diminished by the screw.

An instrument, if necessary, might be constructed on the same principle for the upper jaw. I think it will be available in all cases of hæmorrhage arising from extraction of teeth.

ANOMALOUS NERVOUS AFFECTION.

By Paul William Swain, Esq., Devonport.

[Read at the Exeter Meeting of the Provincial Medical and Surgical Association.]

Robert Rosevear, aged twenty-eight, contracted a venereal disease when at the age of twenty, for which he was treated by an empiric. He soon after suffered an attack of rheumatism, which lasted, with varying intensity, for some months.

Three years ago a severe pain fixed itself in the region of the occiput and upper cervical vertebræ, and soon after these parts began to enlarge. It appears that he took very little notice of these symptoms for some time, until their increasing intensity compelled him to seek assistance in medical advice.

Accordingly, he was directed to take iodine, and was treated for a venereal periostitis. The treatment that was applied had the effect of diminishing the enlargement in the occipital region, although a considerable tumefaction still remained, which continues at the present day.

Eighteen months ago, the pain in this tumefaction became much aggravated, and extended down the back. The patient now, for the first time, began to suffer from slight twitchings, principally in the lower extremities, but occasionally in other parts of the muscular system. These gradually increased until they became violent spasmodic actions of extension and flexion.

The poor fellow graphically describes all the means he took, as he expresses it, "to prevent his thigh-bones from being drawn out of their sockets;" his lower extremities seemed to elongate and were then suddenly flexed upon the abdomen. Occasionally the arms were forcibly thrown above the head, though the upper extremities have always been more under the control of volition than the lower. The limbs were slightly benumbed, especially the right leg, but the sense of touch on the surface seems to have been throughout unimpaired; he experienced a sense of impending suffocation; the breathing was often hurried; the least emotion increased his spasms; he had frequent priapism and spontaneous emission.

Nothing seems to have been done for the poor fellow at this stage of his suffering. His friends came to the conclusion that he was bewitched, and accordingly consulted a professor of the black art.

The lower extremities lost the intensity of their spasmodic actions, but by degrees were drawn up in a state of tonic spasm, so as to assume the contracted position (shown in the drawing), and from which he has no possible power of removing them.

His case at length came under the notice of some medical practitioners, and various remedies were administered, but what were their nature, or with what view prescribed, I am not aware.

One recommendation, however, which could have emanated only from a very superficial view of the pathology of the case was, that the contracted extremities should be subjected to daily considerable extension; and on one occasion of the performance of this operation, early in June last, a too rough hand made such violent extension of the left leg, that the thigh-bone, probably affected by venereal taint, gave way at its middle third, in which part the patient had for some time felt occasional pain.

It was at this period that I first saw the case, and being struck with its peculiarities, although, with the prospect of considerable trouble, determined to examine it with attention.

Every means have been devised to keep the fractured thigh in a state of extension, but as the patient can only lie on his back or partially on one side, it will be at once understood that the difficulties in the attempt were not to be overcome. Excoriations at the points where the extending forces had their bearing, compelled us to relinquish all hopes of effecting anything like a sightly cure of the broken bone. The large adductor muscles have drawn the lower end of the fractured bone almost to a right angle with the upper portion, whose point very readily penetrates the integuments and skin of the thigh, which is nearly five inches shorter than its fellow, nor is there at the present moment any union between the broken portions of bone.

The patient suffers no pain of any moment, nor has there been any severe suffering from the first moment of the fracture. The following is a short summary of his condition:—

Slight emaciation about the legs; appetite good; bowels open daily; pulse natural; sleep tolerably good; mind serene and in full power; the head is slightly thrown back, but he can move it laterally to a considerable extent.

When the bed clothes are removed so that the cold air comes in contact with his surface, the lower extremities are still further drawn up, until the heels rest upon the nates; after a short time they gradually relax, and assume their usual state, but tickling the soles of the feet reproduces the spasmodic contraction. If he is subject to any intense and sudden emotion, the arms partake of the same kind of flexion, although in general he can help himself to all he requires with his hands.

The moment he feels a call of nature, either from the bladder or rectum, no time must be lost in attending upon him, or he is unable to retain the contents of either viscus; he never wets his bed, however, during sleep, nor has he at present any priapism; occasionally he has slight dysphagia, and must have a good mouthful to swallow with ease; he has by his side a kind of padded crutch, with which from time to time he pushes down the heels, but the extremities maintain a nearly uniform position whether sleeping or waking.

The patient being yet alive, we can only speculate on the exact pathology of this interesting case, but we are considerably assisted in our own judgment by the details of a very similar one mentioned by Dr. Marshall Hall, in his late volume on "Diseases and Derangements of the Nervous System," paragraph 1287, when a post-mortem examination discovered a nodule of bone in the dorsal region of spinal canal.

I think we may fairly infer that, in the case before us, a venereal exostosis attached to the inner surface of one of the inner cervical vertebræ, is pressing upon the spinal marrow, and one is at once struck with the resemblance between this patient and the Batrachian reptile in which Dr. Marshall Hall divided the spinal marrow high up in the neck.

In both instances the power of volition is suspended

perience at the Pennsylvania Hospital, and constitutes, perhaps, an important item in the treatment.

The two following cases have been prepared for publication, from notes furnished me by Dr. Hollingsworth, the resident physician of the hospital. They are selected from several others, as presenting the most decided influence of the remedy under circumstances somewhat embarrassing.

Case.—William Boyle, aged twenty-three years, was admitted into the Wills Hospital in the latter part of the eleventh month (November), 1841, for granular ophthalmia. He had been suffering with inflamed eyes for four months prior to his admission, for which he had been treated on a rigid antiphlogistic plan, with the continued application of emollients to the eyes.

Soon after his entrance into the hospital the inflammation of the conjunctiva became more acute (probably from exposure in travelling); this was relieved by local depletion from the temples, cooling lotions, &c.; after which solid sulphate of copper was applied to the inner surface of the lids; he was placed on a good diet; took syrup of the iodide of iron, chamomile decoction, &c., under which treatment the eyes rapidly improved. He soon after suffered from another relapse attended with inflammation and ulceration of the cornea, severe circumorbital pain, with a feeble pulse, and pallid countenance, from which he was again in a great measure relieved, under the treatment of Dr. Hays. It was not long, however, before he was again seized more violently than before, and when I took charge of the wards, at the commencement of the present year, his condition was quite deplorable.

He was suffering from deep-seated pain in the head and around the orbit, aggravated at night, and preventing sleep, except under the influence of powerful anodynes; the eyes were highly injected, the sclerotic coat, cornea, and iris, being involved. He had photophobia to a great degree, and very little vision. The constitutional symptoms were equally discouraging. The pulse was feeble, skin cool and relaxed, and countenance dejected. Under the use of a pill, composed of a grain of sulphate of quinine, and half a grain of the extract of cicuta three times daily, with counter irritation to the nape of the neck, anodynes, nutritious diet, &c., some amendment took place. This, however, was of short duration, all the symptoms returning with increased severity. In the early part of the second month (February) erysipelas appeared around the eyelids, and rapidly extended over the face with alarming constitutional symptoms, as delirium, furred tongue, feeble and rapid pulse, &c. The carbonate of ammonia, in doses of five grains, was given with great advantage, together with beef tea, oysters, &c. As the erysipelatous eruption declined, the pain in the head diminished, and the condition of the eyes improved, but still the circumorbital pain continued violent, especially at night. A slough was extending on the cornea of the right eye; great intolerance of light, with injection of the vessels of the conjunctiva and cornea, and contraction of the pupil still existed. The strength of the patient was exceedingly reduced; his appetite poor; expression of the countenance haggard and distressed; features contracted; skin relaxed and pallid; anodynes produced but little comfort; the stomach was irritable, and rejected tonics; and I entertained strong fears that vision would be greatly impaired, if not lost, by the still active disease of the eyes. It was under these circumstances that the iodide of potassium was resorted to. It was first given in doses of two grains three times daily, in a tablespoonful of the compound syrup of sarsaparilla.

An improvement was manifest in less than forty-eight hours, which induced us to increase the dose to five grains.

Under this treatment the pain vanished in a short time; the patient slept soundly without anodynes; his strength and appetite rapidly improved, and, for the first time since his admission, he was unaffected by changes of weather.

The application of a solution of the nitrate of silver to the eyes, together with the improvement of the general symptoms, produced a corresponding change in the local inflammation; and when I left the house his case was in every respect promising, but little doubt existing that he would recover the use of his eyes. He was still taking the remedy in doses of six grains three times daily, and had not suffered from pain in the head since he commenced it.

The case of James Dougherty was in some respects analogous to the above. This man was admitted in tenth month (October), 1841, for chronic conjunctivitis, which had existed for a considerable time. He complained of a steady, dull pain in the side of the head, over the parietal bone, which extended at times over the scalp, and was often very acute. The pain was aggravated at night, was attended with excessive intolerance of light, and injection of the conjunctiva, sclerotic, and cornea. The patient was greatly affected by changes of weather, slept but little even after anodynes, and labored under great constitutional irritation.

The local applications generally employed at the hospital in similar cases, were of no avail; nor did any treatment appear to produce permanent or decided benefit. The dull pain on the side of the scalp was constantly complained of, and the patient was afflicted with frequent paroxysms of the most acute suffering, which extended over the cranium, and around the orbits. After trying a great variety of remedies for more than two months, I was induced, from the success attending Boyle's case, to resort to the same remedy in this case. Three grains of the iodide of potassium were given three times daily in the syrup of sarsaparilla, and all other remedies laid aside. The change which ensued was surprising. In two or three days, the pain which had been so constantly present for several months was greatly alleviated, so that the patient was able to sleep without anodynes. The dose was now increased to five grains, under which the appetite improved, and the general health of the patient seemed to undergo a revolution. The pain disappeared altogether; the injection of the eyes, and the intolerance of light were rapidly diminishing; and when I left the patient under the care of my successor, Dr. Fox, the prospect of his speedy recovery appeared very encouraging.

REMARKS.

The most striking effect which the iodide appeared to produce in these cases, was its influence on the

over a great portion of the body; in both the application of external stimuli produces similar results. Here we have in a human subject an almost entire division of the two great antagonising functions—the voluntary, and the excito-motory.

We have an excess of irritability stored up in muscles, because the natural channel for its liberation—a connection with the brain—is cut off. We have the sphincters, the ejectors, and the penis, all involved in a morbid chain of action; we have that part of the muscular system, pronounced to be most under the excito-motory power, exhibiting all the phenomena of such a relation. In a word, we have a most interesting confirmation of all Marshall Hall's demonstrations—demonstrations daily gaining certainty from the bedside—and which incontestibly prove of how high an order the genius of their author must be, entitling him to the admiration and gratitude of the present and all future races of the medical profession.

CASE OF CHOLERA MORBUS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you deem the following case of cholera, of the kind which was for a time so prevalent and fatal in this country only a few years ago, at all interesting, in a practical point of view, I beg you will give it an early insertion in the "Provincial Medical Journal."

Yours obediently,
JOHN WICKERS WEST, M.R.C.S., &c.
Poole, August 17, 1842.

Thomas Fall, aged forty-two, a strong, powerful man, by occupation a policeman, was attacked on Sunday night last, or rather early on Monday morning, the 15th instant, whilst on duty, with violent pain in his bowels, which was speedily followed by vomiting, and purging of a fluid resembling rice gruel. He was immediately assisted to his own home, but would not consent to have medical aid until ten o'clock in the morning, when I was sent for, and found him suffering from the following distressing symptoms:—Skin of a livid and slightly blue color, covered with a cold clammy perspiration; tongue peculiarly white; extreme thirst; pulse about 45, erect, and fluttering; great depression and anxiety of countenance, with sunken eyes; cramp in both legs; rice water vomiting and purging, and violent and continued pains in the epigastric region.

I could not ascertain that he had been eating anything the day before which would be likely to disagree with the stomach, but found he had returned home in the afternoon by water from Portsmouth, and had been exposed to an intense heat the whole day, which had the effect of considerably exhausting him. I immediately ordered the following:—

Brandy, one large tablespoonful in half a cup of arrow root every half hour.

Calomel, two grains;
Opium, half a grain;
Aromatic confection sufficient to form a pill, to be taken immediately, and to be repeated every hour, with the following draught:—

Camphor mixture, one ounce;
Compound spirits of ammonia, half an ounce;
Tincture of cardamoms, one drachm.

Fomentations to the bowels to be constantly applied.

Three o'clock. Diarrhœa still urgent, but vomiting less frequent; pulse rather less depressed and more regular; countenance the same. *Vespere:* Since the last report a very decided and marked improvement in his symptoms has taken place after getting two hours' sleep; vomiting and purging have ceased; pulse 65; and there is more vigor and animation in the countenance.

I omitted the brandy, and desired the pills to be taken through the night with the ammonia draught every four hours.

Aug. 15. Has passed a quiet and comfortable night, getting sleep at intervals; no recurrence of vomiting and purging; pulse 75; countenance improved; tongue white. To leave off the pills, but persevere in the draught.

17. Called on him this morning, and found him from home; but was informed by his relations that all symptoms of an urgent nature had ceased, and with the exception of debility was convalescent.

The above was a decided case of cholera, as it occurs so frequently in the East Indies, and interesting from the rapid improvement which followed the treatment had recourse to.

ON THE USE OF THE IODIDE OF POTASSIUM IN OPHTHALMIC DISEASES,

WITH CASES.

By ISAAC PARRISH, M.D.,
One of the Surgeons to the Wills Hospital.

The value of the iodide of potassium, as a remedy in certain diseases of the eye, which have a constitutional origin, or are closely allied to a scrofulous or cachectic condition of the general system, is beginning to attract attention. During a recent term of service at the Wills Hospital, an opportunity occurred to me of employing the remedy in some cases of this description; and, although the number of patients was too limited to warrant a general conclusion as to its powers, yet the results were so striking and satisfactory, as to create a strong impression in its favour, especially when viewed in connection with the concurrent testimony of others.

If this article could be safely employed as a substitute for mercury in many diseases of the eye, in which we have been accustomed to rely upon that potent medicine; or, if it will produce a strong alterative impression, in cases where an enfeebled or irritable condition of the constitution renders a resort to mercury hazardous, it will constitute a most valuable auxiliary in the treatment of a numerous class of cases, which are exceedingly difficult of cure.

The dose in which we administered the article at the Wills Hospital, was from two to six grains, three times daily, in a tablespoonful of the compound syrup of sarsaparilla. The selection of the latter article as a vehicle for the iodide was prompted by the ex-

severe neuralgic pain, from which the patients had suffered so long and so intensely. The remedy seemed to put a period to this in a very short time, and the relief was permanent, placing the patient beyond the influence of those changes of temperature which so often induce or aggravate this peculiar affection. As a consequence of this immunity from suffering, tranquil sleep was enjoyed, the appetite and strength returned, and the local inflammation rapidly subsided.

The remedy was tried in several other cases of strumous inflammation of the eye, in all of which its effect was happy, except in one instance. That was the case of a young woman with scrofulous iritis, whose disease had resisted a great variety of treatment during several months, and in which I had strong hopes of effecting a change by the iodide. It produced in this instance severe vomiting and purging in doses of three grains, and could not be borne even in two grain doses.

In the case of a young woman with scrofulous conjunctivitis, in which the cornea and iris were slightly involved, secondarily, I relied altogether on the iodide in five grain doses, without any external applications, except a few leeches to the temple, in the commencement of the attack. The improvement in this case was much more rapid and steady than is usual in this form of disease.—*Philadelphia Med. Examiner*, April 16, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, AUGUST 27, 1842.

A circumstance has recently occurred in Ireland which we think it our duty to record as a warning and example. John Pasley, senior coroner of the county of Dublin, and B. R. Shanahan, a medical man, who had been in the habit of attending the coroner at his inquests, have been found guilty of fraud, and condemned—the one to twelve, the other to six months' imprisonment.

The fraud was concocted between the coroner and the surgeon in the following manner. A young man, named Fry, died rather suddenly, and was interred without any inquest having been held to ascertain the cause of death. Four days after his burial, Mr. Shanahan presented an order, from the coroner, to the county treasurer for the sum of £3 10s. "for examining the body of the late George Fry, Esq., and attending before Mr. Pasley and his jury, at an inquest held by him upon the 29th of September, and giving evidence as a medical witness." The order was in the handwriting of the coroner, and it was signed by Mr. Shanahan. Now, as no inquest was holden on the body of Mr. Fry, the surgeon could not have given attendance at it, or examined the body for the purpose of enlightening the minds of the jury; there was, therefore, collusion and fraud on the part of the coroner and his medical attendant, and, after a severe reprimand from Baron Pennefether, they were sentenced to imprisonment. Had the indictment been framed under the statute against obtaining money under false pretences, the punishment would have been transportation.

We regret extremely to state, that this is not the first offence of the kind by which the dignity of the judge and the honor of the profession have been sullied in Ireland. Mr. Pasley had, it appears, been already tried for a similar crime; a coroner named Irwin was transported in March last for the fraudulent issue of orders; and if any deduction be legitimate from the character of some of those who fill the office of coroner in Ireland, and from the strange connection which they appear to have formed with the same medical attendants, we fear that the evil is great and wide spread.

Great, indeed, it is, when a man holding the high office of a judge and a member of our own profession, which, above all others, is one of honor and without reproach, appear before the bar of public justice, and are found guilty of common swindling. There must be something rotten in a system under which such things occur, and it is to be hoped that an effort will be made to place the system on a better footing—to prevent the recurrence of acts whereby the purity of justice and the respectability of the medical profession are so grievously compromised. A law to regulate the election of coroners in Ireland, and to ensure the proper selection and remuneration of medical witnesses, is absolutely requisite.

In our last number we mentioned the changes which had recently taken place in the medical department of the University of Edinburgh. Dr. Home has resigned the chair of practice of medicine, to which Dr. Alison has been unanimously elected, and Dr. Henderson fills the chair of pathology, vacant by the resignation of Dr. Thompson.

The election of Dr. Alison to the chair of practice of physic cannot fail to be most beneficial to the university. The truth is, that time had laid his heavy hand on many of the professors, and the state of oral instruction had become intolerable. Dr. Home especially was long since physically incapable of fulfilling the duties of the office which he held.

It is now many years since we assisted at a lecture given by the worthy professor. The pupils were "*rari nantes*" in the vast amphitheatre; one half of them were playing cards; the other half listening to the notes of an old violin, on which an Irish student was playing "Home, sweet home;" while the professor, unconscious of that which was passing on above him, mumbled from an ancient manuscript words unheard by himself, and unheeded by his pupils.

The valedictory letter of Professor Home to the University of Edinburgh is worthy of being placed on record; it is thus conceived:—

"Edinburgh, August 8, 1842.

My Lord,—Having for forty-four years discharged the duties of the chairs of materia medica and of the practice of medicine; considering also that, from my very advanced age (although still enjoying the most perfect health), I am become unable to perform the important duties of the professorship, which I now hold; also wishing, before I go home, to have some time free from my laborious duties, I have for some time intended, and now herewith offer to your lordship and the other honorable patrons of the college, to resign the professorship of the practice of medicine, on condition of your providing a retiring allowance of £300 sterling per annum, and making such other arrangements as may seem necessary for securing the requisite payments of the said allowance during my life.—I am, &c.

James Home.

To the Right Hon. the Lord Provost."

The £300 per annum with which the career of the professor thus characteristically terminates is to be taken from the pockets of his successors, £150 being paid by Dr. Alison, the remainder by the professor of the theory of medicine. It is questionable how far it may be a prudent measure to leave the burthen of Dr. Home's retiring pension on his successors; but we suppose that it was a matter of necessity, and that the university possesses no funds whence the pension could be derived. But enough of Dr. Home and his pension; the subject on which we are desirous of saying a few words is the election to the chair of pathology.

Our readers are, doubtless, aware that the medical professors of the University of Edinburgh are elected by the town council, consisting of the Lord Provost and some thirty-three or thirty-four burgesses. In former times the Provost of Edinburgh and the town council were selected from the most notable persons of the Scottish capital; the provost was generally a man of some rank; the burgesses men distinguished by their social position; they were, in fact, the aristocracy of the place. Now, however, the burgesses have merged into that rank which is well designated *bourgeois;* they are, for the most part, respectable tradesmen, who have gained wealth and station, each in his respective calling.

On these respectable representatives of our commercial power devolves the important duty of selecting the medical professors of the most distinguished amongst our universities. Are they capable of exercising this power with due discretion? Though filled with an anxious desire to sustain the honor of their university, are the burgesses or bailies of Edinburgh men fitted by education, experience, or habits of life to select amongst competitors in the highest departments of science? If we seek for an answer in the recent election to the chair of pathology, we fear that answer will be unfavorable to them. They have rejected a man endowed with the most solid attainments, admired by all for his extensive knowledge, a man equally honored in his own and in foreign countries, for a young man, who, to say nothing else, is an *ignotus homo;* possessed of knowledge, we are bound to believe, but certainly without professional rank at home or celebrity abroad. This is not the way in which the tottering frame of the University of Edinburgh is to be strengthened. The town council have, at the present juncture, a deeply important duty to fulfil, and unless they evince more judgment—more respect for the voice of public opinion—the glory of their idol will have departed for ever.

MADAME LAFARGE.

The last number of the "Edinburgh Review" contains a curious and highly interesting article on the trial of Madame Lafarge. The writer of the article points out in strong language the points of difference which exist between the mode of procedure in English and French criminal tribunals, and, after a careful examination of the evidence, concludes that no impartial jury, properly instructed, would have found the unfortunate woman guilty of the crime laid to her charge. We mention this, cursorily, because the opinions of the Edinburgh reviewer are in the main corroborative of those delivered on the same subject, many months back, by Dr. Martin Lynch, in one of the early numbers of this Journal.

REVIEWS.

The Nervous System and its Functions. By Herbert Mayo, F.R.S. London: Parker, 1842. pp. 182.

This work was originally written by Mr. Mayo for a second edition of his engravings of the brain, which he thought would be best illustrated by a summary account of the functions of the nervous system. That publication having been set aside for the present, the plan was abandoned, but in the mean while the form in which the survey had been cast appearing to the author to display what had been before discovered with new distinctness and force, he re-examined the manuscript, re-wrote portions thereof, and the result is the work before us.

The subjects treated of are, the relation of vitality to mind, the laws of the nervous system relating to sensation and voluntary motion, the functions of the cerebral organs, the influence of the nerves on the bodily functions, and finally the power of perception. The plan adopted is to lay down a law or precept, and then illustrate it by an example drawn from human or comparative physiology. This arrangement is carried into effect throughout the work, and is one calculated to simplify study, and assist the reader in

comprehending the author's views. It is evident that this summary does not admit of analysis—it being itself an analytic notice of the views of physiologists with regard to that important branch of study.

ACADEMY OF SCIENCES, PARIS.

August 16.

REVIVIFICATION OF MICROSCOPIC ANIMALCULÆ.

M. Milne Edwards read a report on a memoir of M. Doyere on this subject.

It is well known that when a few drops of water are sprinkled on moss which has been kept dry for months or years, certain microscopic animalculæ make their appearance; but it has not been decided whether these little animals are really brought to life again, or whether their ova had not remained concealed in the moss, and were afterwards vivified.

M. Doyere has found that, with the assistance of the microscope, we can discover in the dried sand of rain-spouts a number of small bodies, which closely resemble the remains of these animalculæ, deformed through the effects of desiccation. The author has taken these remains, carefully dried them on glass plates, and found that they were afterwards capable of being restored to life. On pushing his experiments further, the author found that, on applying heat at 145° or 150° Fahrenheit, the animalculæ were destroyed, and it was impossible to bring them to life again. But when they were previously dried, and all the moisture which they naturally contain was gradually expelled, they resisted a very great degree of heat; in some experiments the heat was carried to 120° C, and the animalculæ afterwards restored to life.

ABSORPTION OF REMEDIES.

M. Mialhe communicated some observations on the absorption of medicinal substances. All substances capable of absorption may be divided into two species. The first comprises those which are not capable of forming an insoluble compound with the albumen of the blood; for example, the alkaline oxides, the alkaline carbonates, and several of their salts, the compounds of arsenic and antimony with oxygen, hydrocyanic acid, carbonic acid, ammonia, all the neutral gases, nearly all the vegetable acids, all the organic bases, and most of the coloring and odorous principles.

The second species comprehends those substances which form an insoluble compound with the albumen of the blood. These are most of the inorganic acids, many of the metallic salts, tannin, creosote, &c.

Substances of the first class act immediately on the nervous system; those of the second never act immediately on the nervous system, their influence being remote, and proportionate to the time required for the action of the oxide of sodium and alkaline chlorides of our fluids on the albuminous compound.

The chemical substances comprised in the first class pass rapidly into the urine, while those of the latter remain much longer in the circulation, and are not removed until the albuminous compound has been more or less decomposed.

From the above principles we obtain an explanation of many anomalies connected with the absorption and elimination through the kidneys of several chemical substances. For example, it may be asked why sulphuric, nitric, and hydrochloric acids, are absorbed so slowly and pass so slowly into the urine, while arsenious and antimonial acids, and most of the organic acids, are taken up so quickly. The reason is, that the first class of substances form a combination with the elementary basis of our tissues, which it is more or less difficult to break up; while the second class have no tendency to form an analogous combination. The following fact is still more conclusive:—The oxides of iron pass off very slowly by the urine, or, if we believe Berzelius and others, do not pass into the urine at all; but Wöhler shows that the compound of iron with cyanogen and potassium passes into the urine with great rapidity. Now, the oxides of iron have a strong affinity for albumen, while the double cyanuret, just alluded to, has no tendency whatever to unite with albumen.

ACADEMY OF MEDICINE, PARIS.

August 16.

ANTIDOTE TO CORROSIVE SUBLIMATE.

M. Mialhe presented the following note:—It results from my experiments that the hydrated proto-sulphate of iron (a substance quite innocuous) possesses the property of instantly decomposing corrosive sublimate. The products of the decomposition are the proto-chloride of iron and the bisulphate of mercury, inert substances.

ZOOLOGICAL SOCIETY OF LONDON.

July 26, 1842.

A paper was read, entitled "Observations on the Seminal Tubes and Semen of Mammalia and Birds," by G. Gulliver, Esq., F.R.S., of which the following is a short abstract:—

SIZE AND CONTENTS OF THE TUBES.

This is an interesting subject, because it is connected with the habits and economy of the animals. The author, after alluding to the valuable labors of Professor R. Wagner, gives an extensive table noting the state of the testes and their contents, with the diameter of the seminal tubes at different periods. The size of the tubes increases during the growth of the animial, even before birth. In birds, as the seminal tubes become turgid and enlarged in the spring, their coats are much attenuated from the distension by the semen, contrary to Professor Wagner's observation that they expand and become thick at that time.

MOLECULES OF THE SEMEN.

These have much the same chemical and physical characters as the minute oil-like spherules depicted by the author (in his App. to Gerber's Anat., p. 103), as forming the mass of the particles of the juice of the supra-renal glands. The common diameter of the seminal molecules is about $\frac{1}{20000}$ of an inch, but they vary from $\frac{1}{35000}$ to $\frac{1}{80000}$. The author supposes that these molecules are connected with the perfecting of the semen, since they are very abundant in the seminal fluid of birds and reptiles just before the testicles become ripe, and wholly disappear, or become scanty, as soon as the spermatozoa are completely formed. He remarks incidentally, in reference to a former notice, in the 59th page of the Atlas to Gerber's Anatomy, of

the difficulty of determining the exact shape of particles so very minute, that many which he has formerly mentioned as spherules may in reality be discs, in conformity to some of the elaborate researches of Dr. M. Barry.

PIGMENT OF THE TESTES.

In certain birds the testes are yellow or black. The author describes the ramifications of the black pigment in the seminal tubes or their coats of the common starling.

SPERMATOZOA OF THE GENUS CERVUS.

The author mentions the immature spermatozoa as coiled up two or three together within cells, the bodies of these spermatozoa generally appearing on their edges.

He showed drawings of the perfect spermatozoa of the wapiti, red deer, and fallow deer, especially with reference to the singular statements in the 5th vol. of Sir E. Home's Comparative Anatomy, which have been well commented on by Dr. Davy, in his Researches, vol. 1, p. 338.

CHEMICAL CHARCTERS OF THE SPERMATOZOA.

The spermatozoa of mammalia are peculiar for resisting the action of many potent reagents.* These spermatozoa are but little or not at all affected by nitric, muriatic, acetic, oxalic, tartaric, and citric acids, by saline solutions, or by caustic alkalies. But the *spiral* spermatozoa of birds are acted on energetically by the acetic and other vegetable acids. Yet it is singular that the *cylindrical* spermatozoa of birds, as of the common swift, are nearly allied in chemical characters to the spermatozoa of mammalia.

When the seminal fluid contains an abundance of corpuscles, it is quickly made ropy by alkalies and by saline solutions—an effect which is produced by these reagents on other animal fluids containing great numbers of fresh primary or isolated cells, or cell-nuclei, as more particularly noticed, regarding the lymph, in the Appendix to Gerber's Anatomy, p. 91, 96, and 97. In some recent experiments the lymph globules were but slightly altered, merely a little mis-shapen after having been kept several days in saline solutions.

LYMPH GLOBULES OF BIRDS.

It is well known that the blood of the vertebrate animals contains, besides the red discs, a few pale globules which have commonly been regarded as those of lymph. But in birds I have found that the globules of the juice of the lymphatic glands are rather smaller than the pale globules of the blood; and the same fact is observable in mammals. Yet the descriptions since Hewson's time of the lymph globules of birds have always been drawn from the pale globules of their blood.

This distinguished physiologist states, that the particles of the fluid of the lymphatic glands of birds are oval, like the nuclei of their blood discs. In the "Philosophical Magazine" for February, 1840, I described the lymph globules of the Napu musk deer as hardly differing from those of man, although the blood corpuscles of that little ruminant, as I had discovered and published in November, 1839, are the most minute yet known; and although the camelidæ have oval blood discs, I found that the globules of the juice of the thymus and of the lymphatic glands, and of the pus of these animals, have the same figure and nearly the same size as the corresponding globules of other mammalia (see Med. Chir. Trans., vol. 23). It was, therefore, to be expected that the lymph globules of birds would be similar in form, and such I have lately ascertained to be the case. In a few instances, from one to five of the lymph globules were inclosed with granular matter in a cell. The following table exhibits, in fractions of an English inch, the average size of the lymph globules of birds. For the numerous measurements from which these averages have been deduced, the original paper may be referred to.

Columba livia, Briss., $\frac{1}{5274}$; turdus musicus, Linn., $\frac{1}{5090}$; gallus domesticus, Briss., $\frac{1}{5261}$; strix flammea, Linn., $\frac{1}{5227}$; ardea cinerea, Lath., $\frac{1}{5150}$; corvus frugilerus, Linn., $\frac{1}{5053}$; corvus monedula, Linn., $\frac{1}{5238}$; corvus pica, Linn., $\frac{1}{5001}$ (pale globules, the blood of the same, $\frac{1}{3555}$); sturnus vulgaris, Linn., $\frac{1}{5152}$; garrulus glandarius, Flem., $\frac{1}{4414}$; fringilla chloris, Temm., $\frac{1}{4924}$; fringilla domestica, Linn., $\frac{1}{4681}$; embeliza citremella, Linn., $\frac{1}{4577}$.

The considerable difference in size between the white globules of the blood and the lymph globules is shewn, for example, in the magpie (corvus pica). The magnitude of the lymph globules does not differ much in different birds; although those globules are generally slightly smaller that in mammalia.—*From Mr. Gulliver's Contributions to Minute Anatomy, London and Edinburgh Philosophical Magazine for June*, 1842.

BIRMINGHAM PATHOLOGICAL SOCIETY.

July 2, 1842.

WILLIAM HENRY PARTRIDGE, Esq., in the Chair.

INVERSION OF THE HEART.

Dr. Fletcher brought before the society Edward Smith, aged twenty, of spare habit, and the subject of slightly deformed chest. He became a patient at the General Dispensary a short time since, in consequence of an attack of bronchitis, to which he is very subject; and on examining the chest, Dr. F. discovered that he was the subject of transposition of the heart to the right side of the chest, which, from all that could be made out, appeared to be congenital. The chest sounded well on percussion all over, and neither he nor his friends are aware that he had ever any symptoms which indicate an effusion into the cavity of the chest, nor that he had at any time suffered from pleurisy. There did not appear to be transposition of any other viscus.*

SLOW PULSE.

In consequence of a promise made at the last meeting of the society, Dr. Fletcher introduced to the meeting Samuel Mason, aged forty-five, the subject of slow pulse; it was found to be at that time 36 per minute. Dr. Fletcher said that he has counted it in the morning before the patient had risen from bed, and found it only 28 in a minute, and also when he was engaged in carrying out his work, and at that

* This fact, as regards man, may probably be turned to account in medical jurisprudence.

* In cases of complete inversion of the heart, the liver is always found at the left side.—EDS.

time found it 38, and had never found it to exceed 40, even after walking up hill from his home to the dispensary. Mason first presented himself as a patient at the Dispensary on Dec. 9, 1841, suffering from giddiness and symptoms of determination of blood to the head, to such an extent as, at times, he scarcely knew where he was, and was often obliged to run to walls to support himself from falling in the streets, with a pulse not more than 34. He said he had not had any injury to the head or neck. The sounds of the heart were not abnormal, but it appeared to be distended to almost as great an extent as possible before each contraction, which takes place in a very sudden manner. He had been ill about eight months.

Cupping to the back of the neck and purgatives were prescribed, and afterwards alkalies and stomachic medicines; but the most beneficial remedy to him was a seton, which he continued in the back of the neck for some time. At present he is occasionally bled, and takes aperient medicines.

CARCINOMA OF ABDOMINAL PARIETES.

Dr. Fletcher then exhibited to the society a specimen of carcinoma, which had formed a tumor extending five inches below the umbilicus, and yet intimately connected with the liver and pylorus of the stomach. Ulceration had taken place at the umbilicus, which communicated with the interior of the stomach, through an ulceration in the pylorus, so that the contents of the stomach could be passed through the ulceration at the umbilicus.

Mr. Clayton, Mr. Tarleton's pupil, kindly communicated the following particulars relating to the case, previous to his becoming Dr. Fletcher's patient:—

William Wallis, aged sixty-two, a cooper, applied to Mr. Tarleton for relief on account of a severe attack of asthma, with which he had been troubled for several years, together with obstinate constipation of the bowels, and severe pain in the region of the stomach, which he compared to something dragging it down. He continued in this state, being better and worse at intervals, until January 26, 1842, when he became considerably worse as regards the pain in the stomach. At this time he was leeched and blistered, and continued saline medicines and the compound senna mixture, which was the only purgative he could take without occasioning sickness. Under this treatment he improved slightly until the beginning of March, when the pain became more severe.

April 8. He showed me for the first time a hard tumor situated below the umbilicus, and nearly as large as an infant's head, which broke at the umbilicus about the latter end of the month, and discharged a pint or more of exceedingly offensive matter. No fluctuation existed at any time. This discharge was going on when he left the Town Infirmary and became Dr. Fletcher's patient at the General Dispensary.

Dr. Fletcher then gave the following account of this case:—

William Wallis, aged sixty-two, became a patient of the General Dispensary in May. He was evidently in a state he could not recover from, much emaciated, and his complexion is of that pale yellow color which indicates organic disease. He complained of sinking and want, and stated that he had not enough to eat; he complained of pain in the stomach and a dragging-down sensation; pulse 90, and very weak. He had a hard tumor in the abdomen, which appeared situated in the parietes; it was movable with them, and only when pressed down received any impulse from the arterial pulsation. At its extreme upper part was the umbilicus, from which it extended downwards in the median line about five inches; it measured about three and a half inches across; a white purulent or chyliform matter was discharged from a very small opening in the navel; this tumor was described to me as having been larger before the discharge from the navel took place. As treatment, his strength was attempted to be supported by cordials and tonics, and his pain allayed by anodynes. As there was no hope of cure, it was recommended that the opening in the navel should be enlarged by dilatation, so as to allow free exit for matter, by which accumulation, and pain from distension would be avoided. He continued getting weaker, and sank on the 10th of June.

Permission was obtained to examine the tumor and cavity of the abdomen, which was done. Twenty-eight hours after death decomposition had not commenced.

The body much emaciated. An incision was made from the ensiform cartilage to the symphysis pubis, leaving, by two semicircular incisions over the tumor, that portion of the parietes intact in which the tumor was situated. On pulling aside the integuments, the liver and stomach were found pulled down to the upper part of the tumor to which they were attached; the pyloric orifice of the stomach very intimately so. The tumor was covered posteriorly by the peritoneum, and was completely independent of the intestines, but at its upper portion was very closely connected with the pylorus of the stomach.

On making an incision into the tumor, in the median line from the umbilicus downwards, it was found to be carcinomatous in its structure, and at its posterior portion was situated a cavity which contained about four ounces of white chylous pus; this cavity communicates with the opening at the umbilicus above and anteriorly, and posteriorly there was a communication with the pylorus of the stomach, through which a probe could be passed from the cavity in the tumor into the cavity of the stomach. The pylorus was about one inch thick from carcinoma, except at the seat of the ulcerations, which were about an inch and a half long by an inch, with hard, irregular edges. At this ulceration the pylorus communicates with the cavity in the tumor. The coats of the stomach were thickened, and the organ was generally enlarged.

The liver is healthy in its structure.

All other organs of the cavity of the abdomen healthy, except in their displacement, which was caused by the position of the liver and stomach.

The kidneys and urinary organs were healthy.

The hand passed up into the chest through an opening made in the diaphragm was all the examination which was permitted of the organs of the chest. There were no adhesions of the pleura or pericardium, and the feel of the lungs was healthy; they crepitated normally on pressure.

The heart was of its natural size.

The head was not examined.

FUNGOID DISEASE OF FEMUR.

Mr. Russell brought before the society the head and upper fourth of a femur, thinned in its outer bony lamina and much fractured, affected with fungoid or medullary disease; and after reading a case of a very similar disease of the tibia and fibula, from his case-book, which had occurred in 1832, he read the following one, which related to the patient from whom the specimen had been obtained:—

November 6, 1841. I was sent for to Mr. N., a remarkably fine healthy-looking man, about sixty years of age. He had been suffering for some time past from a dull deep-seated pain in the upper part of the thigh and hip-joint; he had consulted me for this pain in September, and since then had been under the care of a physician who had regarded it as a case of chronic rheumatism, and had prescribed guaicum, &c., for him, but without producing any relief from pain. I found him down stairs, but he had great difficulty in moving about the house; his nights were almost sleepless; his general health was good. I examined his limb carefully, the movements were all correct; he could bear pressure, and the movements of the limb did not much increase his suffering. He had great difficulty in moving, and dragged this limb after the other. The iodide of potash was prescribed for him, with an opiate liniment, and Dover's powder. In a few days afterwards, the pain increasing, he was confined to his bedroom, and did not attempt to come down stairs. It became irksome to him to lie down, and for a whole fortnight he sat up in an easy chair day and night; both his legs became much swollen, and he was at length induced to go to bed. Various medicines were prescribed, but all failed to produce any relief. On December the 16th he saw Mr. Hodgson with myself; the limb was again examined with great care, but we could neither of us discover any marked disease, but both agreed that it was exterior to the joint. The movement of the limb now gave him great pain; the hydriod. potassæ with liq. potassæ was prescribed in decoc. sarsæ, and opiate liniment and morphine pills. He pursued this plan of treatment through the whole of February and beginning of March without producing the slightest alleviation in his symptoms, and the only change observable in the limb was, that it was much larger than the other. He became confused in his intellect.

March 12. I changed the plan of treatment, and gave him the oxymuriate of mercury, in decoct. sarsæ.; this he took for sometime, and certainly with marked alleviation from his violent pain, but his mouth becoming sore, the medicine was obliged to be discontinued.

April 12. He was seen by Dr. Evans; the swelling at the hip-joint was greatly increased, and it was now very large; he could not bear the limb to be moved at all. Palliative medicines were prescribed. The disease still appeared obscure. A few days after I was examining him, when I found the swelling much increased, and the femoral vessels so protruded forward as to give me the impression that the tumor itself pulsated.

The painful symptoms continuing, his constitution gave way, and he gradually sunk away and died on Friday the 24th of June.

On the Thursday previous to his death, the nurse said that the limb gave way suddenly whilst they were moving the patient in his bed.

The limb was examined by Dr. Fletcher and myself, on the Sunday following his death.

The upper part of the thigh was the seat of a large elastic tumor; the limb was about two inches shorter than the right, and was in the same position as if there had been dislocation of the head of the thigh upon the dorsum of the ileum. On moving the limb, crepitation was very evident at the seat of the tumor. On removing the skin, the muscles were seen of a dark color, and very thin, and a copious discharge of a bloody colored fluid issued out immediately on removing them; and closely surrounding the joint was a large deposition of medullary sarcoma. The upper portion of the femur was hollowed out by the disease, and broken into fragments, and spiculæ of bone were found amongst the medullary deposits. The head of the femur was hollowed out by the disease, as was the acetabulum, for the finger readily passed through the acetabulum into the pelvis, into which the disease had extended; this ulceration was near the insertion of the ligamentum rotundum, and the parts appeared as if the disease had extended along the ligament, from the femur to the bones of the pelvis. There was also a passage underneath the ligament in the notch of the acetabulum, through which the disease appeared to have been thrown amongst the muscles at the inner part of the thigh. The cavity of the cancellated structure of the bone was filled with medullary deposit at the part where the bone was sawn through, which externally appeared healthy. The femoral vessels passed over the anterior surface of the tumor.

Mr. Russell said that, in both the cases (which was well demonstrated in the specimen before them) the disease had, he believed, originated in the medullary structure of the bone, and that no enlargement of the part affected had taken place until the external table of the bone had been so impaired by the disease, as in some situation or other to have effected a solution of its continuity, which necessarily rendered the disease very obscure in its earlier, or, indeed, until its very latter stages. He regretted that the other parts of the body could not be examined, as, on account of the head symptoms which existed during life, he believes it most probable that the brain was affected with similar disease.

Mr. Alfred Baker then exhibited to the society the left lumbar colon and rectum, which were taken from the patient, on whom Mr. Jukes had operated upon for stricture of the rectum, according to the plan of M. Amussat, by opening the ascending colon in the loin.

The history of this case, with the post-mortem appearances, was published in Number 96.

MEDICAL MEN AND PARISH APPRENTICES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—Your excellent periodical has on so many occasions approved itself to be no less the steady champion of the rights and privileges of the profession than the friend of every useful reform, that I feel it the

less necessary to apologise for submitting, for the solution of some of your experienced readers, a question, not without its importance to the profession, especially at this period, when the consideration of medical reform is likely to engage the attention of the great council of the nation. Your pages have at sundry times discussed the various grievances of the profession; but I do not remember to have once found mentioned in the number the practice of assigning both to physicians and surgeons the alternative either of taking a parish apprentice, or of incurring a penalty of £10. "What is the definition of an apprentice?" One that is bound by covenant to serve "another *man of trade*, upon condition that *the tradesman* shall, in the mean time, endeavour to instruct him in his art." There was no doubt formerly on the matter. The very term apprentice (not servant), forbad its application to any other order of men than *tradesmen;* for how is a professional man to instruct another in his calling, unless such person has received a previous classical education? How can a physician, or barrister, or divine, take an apprentice (above all from the parish) when the law requires, not a learned profession, but a trade to be taught? And even if the learned professions were liable to this annoyance, still it would be an absurdity, unless it were the case (which it never is), that the candidates for the apprenticeship were previously prepared by a classical education to enter on their studies.

But the fact is, the original intent of the law, which was designed to educate the children of parish paupers in some useful trade, is now often perverted from its purpose, and made to subserve the purpose of raising the wind; and so it happens, that any two magistrates may legalise, if they think fit, the infliction of a penalty of £10 each, on any physician, barrister, clergyman, or any other professional person; for it is of course fully understood that none of these parties will receive an apprentice. But it may, perhaps, be said that other professions, as well as the medical, are amenable to this annoyance; but of what other profession can it be alleged that for years, nay often for the greater part of their lives, they dedicate their time and their talents gratuitously to the almost daily service of the sick poor? But a short time ago I heard of an instance of this sort, which occurred in the case of a physician (who took his degree at an English university), who had for a period of twenty-eight years given his uninterrupted services in this way at an infirmary and dispensary without fee or reward, and was, as a crowning compliment for such long gratuitous services, honored by the flattering distinction of having his name inserted in a list with some others to whom an apprentice was assigned. Is this the way to encourage medical officers to exert themselves in the gratuitous exercise of their professional skill? Probably this gentleman had been the means of relieving upwards of 1,000 patients annually for twenty-eight years, and of saving the parish some hundreds of pounds; and yet it seems such services go for nothing. It is high time, therefore, that the profession should understand the real worth of all they can do in this way in the eyes of the public. I do not deny that every right-minded medical gentleman will always feel his own proper reward in his own breast, but let him rest content with that. My object, however, in sending these few hasty remarks, is to inquire, whether a physician is liable, as the law now stands, to the degradation of being treated as a tradesman by having an apprentice assigned him?—and if such is really the case, how far it is likely any attempt to relieve us of this annoyance, in the changes soon about to be introduced into the profession, might meet with support in the proper quarter. At all events, no time is so proper as the present for the consideration of this and similar grievances; for it can hardly be denied that, however honors, and emoluments, and sinecures crown the heads of the luminaries of the two sister professions, law and divinity, the exceptions are but few cases in our profession where, after a life of toil and anxiety, anything else remains to reward a man, except a simple competency, perhaps, during his own life; but even this is embittered by the certainty of leaving perhaps a numerous family unprovided for to the neglect of an ungrateful world.

ONE OF YOUR READERS.

West Riding of Yorkshire,
August 14, 1842.

PROFESSIONAL ETIQUETTE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In reply to the wilful mis-statements in a paper published by Mr. William Reeves, in your Number of the 13th instant, you will oblige me by giving as early an insertion as possible of the following depositions, made by the patient, Thomas Irving, aged seventeen, and his father, on the 19th instant, in presence of Dr. Jackson, Dr. Tinniswood, and Dr. Cartmell, who conducted the examination:—

THE PATIENT'S STATEMENT.—(*Copy.*)

"I had been a patient at the Dispensary for some time. Mr. Reeves several times introduced an instrument, and told me that I had a stone in the bladder, and that I could only be cured by an operation. About a week or so after that, he told me that I might either have the operation done at home, or at the Infirmary. I did not know then who was to operate on me. He afterwards told me that Mr. Page would either cut me at home, or at the Infirmary. I never thought that any one was to cut me but Mr. Page. I never saw Mr. Page.

I saw Mr. Fleming in a turner's shop; I said that I had to see Mr. Reeves at three o'clock. The turner asked when I was going into the Infirmary; I said my father and mother were not willing till I had further advice. Mr. Fleming asked me what was my complaint, and why I did not get other advice. I told him it was expensive, and that Mr. Reeves advised me to go into the Infirmary, but that I wanted to be done at home. Mr. Fleming told me that Mr. Elliot would give me advice for nothing, and I called upon him. Mr. Reeves never said he would operate upon me. He advised me to go into the Infirmary, and told me that the doctor of the Infirmary would operate on me at home if I liked. After I had seen Mr. Elliot, Mr. Reeves told me that no one in Carlisle could remove the stone, except the surgeon at the Infirmary. He also told me that the operation was only a cut in the lisk, and that I would be well

in a fortnight or so; that the two children operated on for stone in the Infirmary had both recovered;* and that the operation would be easier to do, and less dangerous on me than on children.† One day when I met Mr. Reeves in the street; he told me twice that he would rather pay my expences to London or Edinburgh, to be operated on there, than let Mr. Elliot ruin me, as Mr. Elliot had never done the operation, and that no other doctor could do it. Mr. Elliot never told me that if I was cut I would be sure to die. I never told Mr. Reeves so. Mr. Elliot never showed me any book or table. He showed me a picture, and told me how he proposed to cut me if he found it needed. He told me the operation was dangerous, and that one in seven or eight died in the hands of the best surgeons, and one in four or five in some. Mr. Elliot never told me he could cure me without cutting. He said the stone, if small, might be made to pass along the canal by enlarging it gradually with instruments of different sizes; but when this failed, he explained to me the operation he afterwards performed.

Mr. Elliot told me also there were either two small stones, or one small one with a notch or groove. He never said there were two stones for a certainty. Mr. Reeves told me one day that there were other means of curing the stone than cutting, and that I need not be afraid of coming up to the Dispensary,"

THE FATHER'S STATEMENT.

"I saw Mr. Reeves once or twice. He proposed my son's going into the Infirmary to be cut for the stone, but never offered to me to do the operation himself. I was not willing for my son to go into the Infirmary on Mr. Reeve's recommendation, as I was not much acquainted with him, and had not sufficient confidence in him. Mr. Elliot told me he would introduce instruments of different sizes, and that the stone, if small, might possibly come into the canal, where it might be cut out without danger. He never told me the stone could be taken out without cutting. When this plan failed, he told me it could be taken out by another method that was less dangerous, but that had never, he believed, been done before. He did not describe the plan to me. My impression was, that Mr. Elliot was to perform an operation with an alteration from the common mode, which would be safer. I think he stated that it had once been done by Sir Astley Cooper."

"*We certify that the above statements were made in our presence, on Aug.* 19, 1842.

W. Jackson, M.D.
George Tinniswood, M.D.
Jos. Cartmell, M.D."

After the preceding statements, it is quite unnecessary to offer any lengthy remarks on such a display of malignity and open disregard for truth as characterise the communication of Mr. Reeves, or to notice other more vague and equally groundless charges contained in it. And I trust that I shall never again be called upon, through the columns of your Journal, to answer accusations of any kind from an individual, whose own conduct, in the case of Mr. Wm. Boyd and Mr. D'Acre, is yet marked by so disreputable a stain.

In conclusion, allow me to say that the operation performed by me, in the presence of Drs. Atkinson, Jackson, James, Oliver, my brother, and assistant (Mr. Fleming), was that of lithectasy, or cystectasy, as highly recommended some months ago by Dr. Willis; and that its result fully justified the preference which, with the concurrence of my medical friends above named, it received.

The opinion given by me as to the existence of one or more stones, and mentioned by the patient, was also stated to the medical gentlemen *before* the operation; and its correctness was proved on the removal of the calculus, which was found to be deeply fissured. As neither time nor space will now permit my entering into the details of the operation, I must take another and an early opportunity of laying it before the profession at such length as its novelty and importance demand.

I am, Sir,
Your obedient servant,
THOMAS ELLIOT, M.R.C.S.L.

Carlisle, Aug. 20, 1842.

*** We feel much pleasure in publishing the justification which Mr. Elliot has forwarded to us; it is, in our opinion, a complete one.—EDS.]

* This was contrary to fact, as one of the children had died before this conversation took place, though its death was never publicly announced.

† The incorrectness of this statement may be seen on referring to any good surgical authority.—T. E.

THERAPEUTIC EMPLOYMENT OF THE SECALE CORNUTUM.

In an essay on the secale cornutum published in the "Medicinische Annalen," by Dr. Bernhard Ritter, of Rottenburg, he thus sums up the therapeutic uses of the ergot in other cases than as an adjuvant to labor. Its use is indicated in cases of hæmorrhage, and especially in uterine, utero-placentar, and puerperal hæmorrhages, in critical epistaxis and hæmoptysis, and as a prophylactic against uterine hæmorrhage in women, who have lost much blood in previous labors. In this last-named case, the ergot is given in the dose of a scruple to half a drachm about a quarter of an hour before the expected birth of the child. It is also indicated in amenorrhœa and dysmenorrhœa arising from torpor of the uterine functions, in vaginal blenorrhagia, chronic idiopathic leucorrhœa not dependant on a venereal cause, and for the expulsion of moles and uterine polypi, or at least to propel them so that they can be seized. The ergot is also recommended in intermittents, when unaccompanied by phlegmasia, and in chronic diarrhœa.

M. Poisseulle has been elected a member of the Royal Academy of Medicine. The election of M. Bouillaud as deputy for Angouleme has been annulled for want of formality.

LONDON SCHOOLS.—Nearly all the private schools in London have, as we anticipated long ago, been closed. The only ones remaining, are the Aldersgate-street school and the school adjoining St. George's Hospital. The once celebrated school of Mr. Grainger is defunct.

RETROSPECT OF THE MEDICAL SCIENCES.

DISLOCATION OF THE FEMUR INTO THE ISCHIATIC NOTCH.

Mr. Greaves, of Great Easton, Rockingham, records a case of this dislocation occurring in the person of a muscular man, aged sixty-nine years, who was thrown from a waggon in July last. When he saw his patient, the left leg was from an inch to nearly two inches shorter than the right; the knee was turned inwards, and the foot completely so, lying on its inner side; the pelvis on the same side appeared higher, and the hip flattened. On placing the limbs together, the toes of the left foot rested upon the ball, or rather, upon the metatarsal bone of the great toe of the other foot; the knee was inverted, and fell into the hollow above the opposite knee; the trochanter was placed backwards. The hand being placed upon the hip, and the limb rotated, the head of the femur was readily discovered in the ischiatic notch, and the following plan of extension adopted for its reduction:—The man was placed transversely in bed on the sound side; a broad girth, well padded, was carried up between the thighs, crossing the pelvis of the injured side, and fixed to the bed-post; a towel was passed round the upper part of the thigh, to raise the bone with; a wet towel was also tied round the limb just above the knee, and a broad strap was buckled upon it, with two short straps attached to it, hanging below the knee; upon these short ones the pullies were hooked, and to the bed-post at the foot of the bed on the reverse side; thus the thigh was made to cross the sound one about its middle. The patient was bled to faintness, and further lowered by tartarised antimony, when extension was gradually and slowly applied, and continued altogether for about sixteen minutes, when the bone being lifted up by means of the upper towel, and the knee rotated inwards, its head slipped into its socket with an audible snap. The appearances of dislocation were immediately removed.—*Lancet*, August 13, 1842.

ABSCESS OF THE LUNG.

A case of abscess of the lung, pointing beneath the umbilicus, is recorded by Mr. Barker, of Bedford, in the "Medical Gazette." He was consulted by a man of intemperate habits, thirty-four years of age, who had a considerable enlargement on the left side of the abdomen, extending from the ribs very nearly to a level with the anterior superior spine of the ilium. Fluctuation was evident, and the tumor appeared as if it were about to point on its upper part. The man had slight cough and expectoration in the morning, no pain in the chest, but pain in the back and loins, and between the shoulders, and occasionally along the left arm and in the region of the heart, coming on suddenly with palpitations. Respiration was puerile on the right side, almost imperceptible on the left, where the sound on percussion was dull. The urine was albuminous. Some weeks after he was seen by Mr. Barker, the abscess, which had been collecting a long while, burst, and discharged about two pints of healthy pus. Hectic symptoms set in, followed by colliquative perspirations and diarrhœa, and terminated fatally.

On dividing the abdominal parietes, the muscles were observed to be split up, as it were, by a quantity of matter, which was found not to have any communication with the abdominal cavity. On more minutely examining this abscess, it was ascertained to exist between the external and internal oblique muscles of the abdomen, to communicate below with the opening through which the matter had made its exit, and above with a small opening, which was traced through the muscles of the ninth intercostal space on the left side, through the firmly adherent pleuræ costalis and pulmonalis, to the interior of the lung on that side, which presented a cavity capable, probably, of containing four ounces of pus. The right lung was tubercular in the upper part, and the air cells and tubes on that side were enlarged. The left lung was exceedingly small, and its entire structure around the large cavity communicating with the abdominal parietes, studded with tubercles in every stage of development. The kidneys presented a fine specimen of Dr. Bright's granular disease.

SUSPECTED ASSASSINATION.

A butcher, of a most passionate disposition, was found dead in the open air, near a quarry, in January last, lying on his back, and a little to the left side, with both his hands in his pockets. A pistol that had been discharged lay on his left side (he was left-handed). Blood had flowed freely from a wound in the head, and had covered the face. Two shots had been heard immediately previous to finding the body. On examination of the body by MM. Devergie and Roger, a round wound, a little above and in front of the right ear, with depressed edges, and communicating with the cranium was discovered. The skin was neither blackened nor torn, and the fracture of the frontal bone, which extended backwards to the squamous portion of the temporal, was clean. Two balls and the wadding had entered by this wound. The balls had traversed the brain, leaving disorganisation in their track, and had impinged against the occipital bone, which was fractured; they had slightly diverged from each other in their course. The wadding did not pass far into the interior of the skull. There was a great effusion of blood on the hemispheres, and at the base of the brain. One of the bullets was blackish, and smaller than the other, which shone as if new, or made of tin. The wadding was a bit of printed paper. Thus far the death might have resulted from a duel; but there was another wound on the left cheek, with unequal, lacerated, contused, bloody, and blackish edges. The surrounding integuments were blackened by the explosion, and by the grains of powder, which had not burnt. The malar bone, the superior maxillary bone and its nasal process, and the zygoma were much fractured, and the superjacent tissues were infiltrated with blood, which also flowed from the nose and external ear. A coarse grey paper wadding was found at the bottom of the wound. There were not any other marks of violence on the body.

The first question that arose was, were both these wounds the result of one shot?—a question at once negatived, inasmuch as, in that case, the pistol must have contained three balls and two waddings, and that

each of these had diverged considerably from the route of the others. The wadding alone might have caused the wound of the cheek, but it could not have produced such extensive fracture of the facial bones. The two wounds were distant nine centimetres from each other. There were then two shots, and, admitting that one was fired in a duel, the other must have been the act of an assassin, fired when the victim was either dying from the wound in the head, or unable to protect himself from that in the face. In support of this view, only seven francs were found in his pocket, while it was known that he had fifty-seven with him. It was a matter next to impossible to decide which wound was the first inflicted. The pistol, which was found lying by the side of the body, was proved to have been charged for some time previously, and that it had had a detonating cap, there being coppery stains on the parts around the touch-hole. The barrel having been cleansed with a piece of white paper, it was proved to have been recently discharged, and that several times, the paper being marked with a blackish moist stain, and the distilled water with which it was washed out being tested with the yellow ferro-cyanuret of potassium, the acetate of lead, the chloruret of platina, and the nitrate of barytes. The weight of the residue from the combustion of the powder was compared with that obtained by discharging similar sized pistols several times, and the examiners were led to conclude that this pistol had been fired more than once. This opinion was afterwards confirmed by the evidence in every respect.

The next question arose as to the possibility of two balls entering the cranium from a single shot, making but one opening, and that not larger, apparently, than if one only had entered. To decide this, M. Lepage, gunsmith, and M. Devergie, made a set of experiments, by which they ascertained that it was perfectly possible at ten paces.

From the investigations thus instituted, then, it appears that the deceased was wounded in two places, both shots being fired very near to him, and one quite close to him—that one of these wounds was necessarily fatal, that one was the act of an assassin, that the two wounds were not the result of one shot, that the pistols used had been charged a long while, and that they had been recently discharged, and that more than once. The only object in shooting him the second time must have been to ensure his death, with a view to the robbery; but why was only a portion of the money taken, and how came his hands in his pockets? If he were fighting a duel, he should have his left hand at liberty, as he was left-handed; nor could it serve the purpose of his assassin so to place them. There are several points left in doubt in this mysterious case.

A young man was afterwards arrested, who acknowledged to have been his antagonist, and to have fought at six paces, the prisoner having the first fire, by which he brought his man to the ground. He says he left immediately with his own seconds, and soon afterwards heard another shot. He refused to name his own friends, and did not know those of his opponent's. He was tried for voluntary homicide, and acquitted.—*An. d'Hygiène Publique.*

SALIVARY CONCRETIONS.

The concretions which are formed in the secerning apparatus of the saliva differ materially, *inter se,* as regards their form, volume, &c. Caumont operated in a case of ranula, where the tumor was so large it prevented the patient's closing his mouth or speaking, and contained at least half a pound of chalky matter. The case is recorded in Dionis's Surgery, by Lafaye, who saw it. Leclerc removed nearly a pound of sandy substance from an enormous sublingual tumor, in the person of a nun of the Annunciata. Generally speaking, salivary calculi are large. They have been seen of the size of a laurel berry, a bean, nut, or small almond; and Léautaud found one as large as, and shaped like, a pigeon's egg. When the calculus is large, there is but one in general, but occasionally two or more are found. Roonhuysen extracted a calculus as large as a chesnut from under the tongue of a man, who had been prevented speaking by it for three years, with great relief; but some difficulty being still experienced, a fresh exploration was made, and another calculus, of the size of an almond, was discovered further back, near the root of the tongue, which was also extracted.

Salivary calculi vary in shape, but in most cases they are long and cylindroid, showing that, if not really formed in the excretory ducts, they are at least developed there. The surface is generally rough, and covered with asperities, and their texture of a stony hardness, but sometimes it is soft and friable, and occasionally porous, in which case they have an unpleasant odor, resulting, in all probability, from the decomposition of the mucus or purulent matter contained in the hollows, with which the calculus is riddled. The chemical composition of these concretions is always the same; they are of a white, chalky color, their yellowish or deeper tint being superficial, owing to the contact of pus, or a sanguinolent fluid. They are generally loose in the canals, but occasionally are adherent, and, as it were, imbedded, so as to require considerable efforts for their removal.

The presence of a calculus in the salivary ducts is not unfrequently not productive of any uneasiness or symptoms indicative of its existence. It occasionally obstructs the flow of saliva, which accordingly collects behind it, and becomes thicker and more viscid. The continued accumulation of the saliva so distends the canal, as ultimately to make a way for itself by the side of the concretion, especially at meal times, and sometimes even a true ptyalism is induced. This is brought on either by the direct irritation of the gland in which or near which the calculus is situated, or by sympathetic irritation of the other glands, extending to them through their excretory canals. The other symptoms occasionally noticed are increased sensibility of the part, and more or less severe pain, rendering mastication, deglutition, and speech, difficult, and even impossible. Inflammation and suppuration are sometimes brought on, the pus escaping mixed with the saliva, and the calculus occasionally coming away with it. The abscess may burst, however, which it generally does into the mouth, and in this case the calculus may escape with it; but if it does not do so, from its being too deeply seated, or adherent, or from its size, &c., the opening remains fistulous. These symptoms may accompany ranula, glandular enlargement, or induration, or a cancerous tumor; the only true sign, in the majority of cases, is the absolute ap-

pearance of the calculus; without that the diagnosis is very uncertain.

When the parts are swollen, inflamed, and suppurating, their examination in the course of the salivary ducts will not enable us to discover the presence of a calculus, especially if it be a small one. In such a case, catheterism of the duct by an Anel's probe will assist us in forming a diagnosis, by the sonorous collision, and the sensation yielded of a hard and more or less rough substance. If the duct is closed, and there is not any fistulous opening, an exploratory puncture must be made, in order to ascertain the nature of the tumor. In a case recorded by M. Dourlens, of a young lady who had presented the symptoms previously mentioned for seven months, with a hard scirrhous enlargement of the left submaxillary gland, catheterism of Wharton's duct was practised with difficulty, without any advantage resulting. An exploratory incision of the gland showed that the calculus was contained in it, and not in the duct, and that it was rather large. The gland was then laid open, and the concretion, weighing seventeen grains, removed. The patient speedily got well.

The only mode of treatment, when the presence of a salivary calculus is producing mischief, consists in its extraction. When it has passed into the excretory duct, and is near the buccal aperture, or has actually passed partly through, its progress may be aided by pressure from behind, and it may be extracted by a pair of forceps. Stanar, Sargoni, Bedor, and others, have given examples of this process. If, however, the canal is too narrow to allow of its extraction, the opening must be enlarged by an incision made upon the calculus, if it be engaged in the opening, if not upon a director, according to the proceedings of Léautaud, Duponget, and Dounlens. The incision should be large enough to admit of its ready removal, without painful and useless efforts; and it must be borne in mind that the other extremity of the calculus may be much the larger. At the same time, there are, of course, limits to be placed to the extent of the incision. M. Maisonneuve had a case where he reached the calculus by a free incision, but he could not extract it. In this extremity he twisted a thin piece of brass wire, so as to form an oval, passed it behind the calculus, and withdrew it by traction.

When the calculus is deeply seated, and the mouth of the duct is closed, the incision for its extraction should be made directly upon the calculus. When it is seated in Steno's or Wharton's duct, the incision should be made inside of the mouth, as an unsightly cicatrix is thereby avoided; and if the opening remain fistulous, it will then be useful rather than otherwise, by supplying the place of the natural aperture; but when the calculus is very large, or very deeply seated, as in the substance of the gland itself, it will be more easy and less inconvenient to remove it externally, and, in case of hæmorrhage, its source may be more readily got at.

The extraction of the calculus may still be attended with some difficulty after the part has been incised, resulting from its shape, depth of situation, or adhesions; and, in either case, rather than use painful and prolonged efforts at traction; it were better to free it with the bistoury. After its removal, the parts should be carefully examined, to see if there are any that may remain, which might otherwise reproduce the same train of symptoms.—*Revue Médicale.*

VACCINATION.

Dr. Graham Weir stated, at a meeting of the Medico-Chirurgical Society of Edinburgh, that he had recently succeeded in performing vaccination with matter kept for twenty years, and which, during that period, had been four times carried to India and back again. Some had been preserved in the dry state between plates of glass, carefully excluded from the air; the remainder was liquid, and had been kept in small glass tubes, hermetically sealed. The tubes consisted of a small bulb about three-eighths of an inch in diameter, furnished with a capillary neck about two inches long. The bulb being gently heated, so as to rarefy the contained air, the mouth of the tube is applied to the punctured vesicle; a sufficient quantity of lymph for one or two vaccinations thus enters the tube, which can then be hermetically sealed at the point without any risk of the matter being injured by the heat employed. It is afterwards got out by breaking off the point, and expanding the air of the bulb by the heat of the hand.—*London and Edinburgh Medical Journal*, July, 1842.

CANCER.

A female patient was admitted into the Hôtel-Dieu, under the care of M. Blandin, who, after a careful examination, was dismissed as incurable. The right breast was as hard as a stone, all the tissues being confounded into an homogeneous mass, the disease affecting the entire gland. The tumor was immovable, and the nipple retracted. Red spots were scattered here and there over and near the breast, appearing at first sight to be superficial, but, on examination, proving to be hard and thick cancerous tubercles. The glands in the axilla, also, were enlarged and indurated. Under such circumstances, M. Blandin did not consider himself justified in recommending an operation.

Supposing the cancerous disease had not been accompanied by tubercles, or by its extension to the axillary glands—in fact, that the breast only had been affected—M. Blandin asks, would the operation have been advisable? He answers by referring to the mobility or non-mobility of the cancerous tumor on the pectoral muscle. He is not satisfied with the ordinary mode of testing this mobile power, by seeking to move the breast while the arm is by the side; to make certain, the arm must be raised and fully extended, so as to place the pectoral muscles strongly on the stretch; then taking the tumor in both hands, seek to move it laterally. If the breast is movable while in this position, we may conclude that the pectoral muscle is not involved in the disease; in the contrary case, when the arm is thus elevated, the gland seems, as it were, nailed to the breast. This is an important point in forming a diagnosis, as by it we are enabled to ascertain whether the cancer has extended to the adjacent parts. If an operation be performed when the tumor is adherent, a relapse may be reasonably anticipated.

Cancer has a great tendency to attack the cellular interstices between muscular fibres, so that cancer of the breast, after having disorganised all the textures of the gland and the surrounding cellular tissue, next affects the interstices of the pectoral muscles, and also

the small lymphatic glands, which, lying in the course of the intercostal and mammary arteries, are freely connected with the lymphatic vessels of the breast. When the disease is so far advanced, the ablation of the breast would not be sufficient; it were, therefore, better to abstain altogether from the use of the knife under such circumstances.—*Gazette des Hospitaux*, June, 1842.

SUPERFICIAL CANCER.

In a recent number of this Journal we published an abstract of a paper by M. Lisfranc, on superficial cancer, erroneously supposed to be deep and extensive, in several cases of which a comparatively simple operation eradicated the disease, without necessitating the ablation of an important organ. M. Bouchacourt, of Lyons, has published in the "Revue Medicale," the details of a very interesting case of cancerous encanthis, in which he performed a modified and less dangerous operation than that usually practised. The patient was an old lady, sixty-seven years of age, residing at Saint Jean-le-bieux, who consulted M. Bouchacourt, in June, 1840, for a red, granular, indolent tumor springing from the internal angle of the eye, close to the caruncula lacrymalis rapidly increasing in size, both forwards and inwards, with lancinating pain, and bleeding at the slightest touch. She would not then submit to any operation, and when she returned, some months afterwards, the tumor had increased remarkably in size, pushing the lower eyelid downwards, and covering the whole eye in every direction. The cornea was opaque, and vision lost. The pain was severe and lancinating; the slightest touch caused the tumor to bleed, and the patient was sleepless and emaciated.

The operation having been decided on, the projecting portion of the tumor was excised by means of a pair of strong bent scissors, when the external surface of the lower eyelid was found to be healthy, but not so its free edge and internal surface. By a slow and careful dissection the diseased growth was entirely detached, when, it being impossible to save the entire eye, the anterior half, the part involved in the cancer, was readily removed. Some other indurated portions near the internal canthus were also cut away, and every part of the wound carefully examined with the finger, previous to its being dressed. The hæmorrhage was very slight. The diseased growth proved to be decidedly cancerous, and the cornea and sclerotica were both involved.

The dressing consisted in simply drawing the eyelids together, and securing them with adhesive plaster, layers of lint, and a bandage. Anodynes were administered from time to time, no bad symptom ensued, and the patient ultimately did well. Nine months have passed since the operation, and no relapse has occurred.

COLO-VESICAL FISTULA FROM CANCER.

An old man was admitted into the Hopital Cochin under M. Brequet, and died there, having previously labored under symptoms indicative of a communication between the bowels and the bladder. On examination of the body after death, the sigmoid flexure of the colon was found to be embedded in an encephaloid and scirrhous mass, on separating it from which an oval rupture at the posterior and lower part of the flexure was discovered, which communicated through the mass with an opening on the posterior surface of the bladder, the contents of the bowel having channelled a way through the cancerous mass. The rectum was scirrhous about two inches above the anus, and the cavity of the pelvis was nearly filled up with the diseased growth. The left ureter was compressed by the disease, and the kidneys were injected, with black suppurating spots on their surface.—*Ibid.*

NEPHRITIS.

Dr. Boyd, in his pathological contributions, narrates two cases of nephritis, in the former of which, where the disease was merely a complication of ulceration of the bowels and peritonitis, the patient was a female, 24 years of age; the principal symptoms were, continued headache and diarrhœa, with bloody stools, as also pain in the lower part of the abdomen. None of the characteristic symptoms of inflammation of the kidneys are mentioned. On examination of the body, the kidneys were of a mottled, whitish, grey color on the surface, on which appeared four or five sloughs of the size of a pea, some of which were nearly detached, and contained pus, apparently mixed with tuberculous matter. The pelvis of the kidney was red, and contained matter of a similar appearance to the above, mixed with urine. The mucous lining of the bladder was also red. The intestines were ulcerated in many parts, some of the ulcers appearing to be undergoing the process of healing. The other case, headed *nephritis, cystitis*, and *abscess in the right kidney*, occurred in the person of a female, sixty-one years of age, who had long been out of health, complaining chiefly of pain in the loins, with a continued fœtid discharge. On examination of the body after death, the kidneys were found to be very large, the right alone weighed $8\frac{3}{4}$ ounces, the left 7. The interior of the right kidney was excavated, and divided into a number of cyst-like cavities, filled with purulent matter, which communicated with the pelvis of the kidney: this was also filled with matter; the greater part of the cortical and tubular portions were absorbed; the mucous membrane lining the pelvis was thickened and of a dark color; the left kidney was of a natural color externally, but when incised the pelvis was found to be filled with purulent matter mixed with blood; its lining mucous membrane was red and thickened. The bladder was small, contracted, and thickened, with some matter on the surface; the mucous membrane was thickened and inflamed. The other organs of the body were healthy.—*Edinburgh Medical and Surgical Journal, July*, 1842.

COCA-MANIA.

This, which is a disease of the Montana district in Peru, is thus described by Dr. Smith. The coca leaf, when moderately used, comforts the stomach of the Indian, as good tea does that of the European, and acts in a peculiarly cordial manner. It enables those who use it in moderation, to endure a great deal of cold, wet, general fatigue, and even fasting to a surprising degree, and with apparent impunity. But though it in this way fortifies and supports nervous and muscular energy, and keeps up an agreeable exhilaration of spirits, when taken to excess, as is done by many of the coca gatherers, who repair to the Montana to indulge in it freely, it is said to excite a species of reverie, which may be looked upon as a variety of mania. Those affected with this coca-

mania are always chewing the leaf, and retire to the solitude of the thickets, finding their joy in flying from the presence of their fellow-men, and indulging in silent contemplation, or rather in vague associations and trains of ideas without exercising any rational control of thought, or feeling an interest in the ordinary concerns and duties of life. The remedy for this disorder is simply to return into society, and leave off using coca to excess.—*Ibid.*

UNIVERSITY OF LONDON.

BACHELOR OF MEDICINE.—FIRST EXAMINATION.—1842.

PASS EXAMINATION.

Monday, August 1.—*Morning*, 10 *to* 1.

ANATOMY AND PHYSIOLOGY.

Examiners—Mr. Kiernan and Professor Sharpey.

1. Describe that portion of the basis of the cranium which is bounded anteriorly by the suture uniting the horizontal plates of the superior maxillary and palate bones, and by the anterior margins of the pterygoid processes, posteriorly by the superior transverse ridge of the occipital bone, and laterally by the ridges separating the zygomatic from the temporal fossæ, and by the posterior roots of the zygomatic processes of the temporal bones. Commence the description at the anterior part; mention the openings, with the parts occupying them, in the order in which they are seen, and the attachments of the muscles and ligaments.

2. Describe the inferior maxillary bone, its mode of ossification, and the changes which it undergoes at different periods of life. Describe also the articulation of the lower jaw and its movements, mentioning the muscles by which they are severally effected.

3. Give the anatomy of the eyelids, and of the lacrymal apparatus comprehending the lacrymal gland and its ducts, the puncta lacrymalia, lacrymal sac, and canal.

4. The viscera of the abdomen having been removed, describe the muscles, vessels, and nerves seen on the posterior wall of that cavity. Describe the lumbar plexus of nerves, and the course of its branches within the limits of the lumbar and iliac regions. Describe also the parts relating to femoral hernia which occupy the space included between Poupart's ligament and the margin of the pelvis, as far as they can be seen from within.

5. Give an acccount of the form and structure of serous membranes in general, the nature of their secretion, and the purposes which they serve.

Afternoon, 3 *to* 6.

1. Describe the articulating surfaces of the astragalus, and the surfaces with which they are articulated. What motions take place in the several joints into the formation of which this bone enters, and to what classes of joints do they respectively belong? Enumerate the muscles of the leg and foot—1st, in the order in which they are met with in dissection; 2nd, classifying them according to their actions; and mention the insertions of the muscles which extend the foot.

2. State the dissection required to expose the course of the deep cervical artery on the posterior aspect of the vertebræ; commencing with the integuments on the back of the neck, and describing the different parts exposed in the dissection.

3. Describe the form, structure, and situation of the submaxillary and sublingual glands, stating the steps of the dissection required to display them *in situ*, and describing the parts immediately contiguous to them.

4. The upper and the posterior parts of the cerebrum, the corpus callosum with the fornix and velum being removed, and the fourth ventricle being laid open by an incision through the middle of the cerebellum, describe the parts brought into view, commencing the description anteriorly.

5. Give the anatomy of the auricles of the heart; comprehending their situation and connections, their external and internal configuration, and the structure of their parietes. What is the usual weight of the heart in the adult, and how does it differ according to age and sex?

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, August 19, 1842.

M. Young, R. Colgate, G. H. Trenery, J. L. W. Dixon, J. Laffan, J. Ellam, A. C. Tupper, M. W. Eager, W. J. Macdougall, G. Dimock.

Monday, August 22, 1842.

F. M. Russell, H. Daniels, T. Lithgoe, E. Hall, A. C. Barker, J. S. Alger, J. Mc Kee, W. Wills, C. A. Brew, J. J. Davies.

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TO CORRESPONDENTS.

Skin Diseases.—We would request the editor of the "Medical Gazette" to take a walk up Princes-street some fine day, and cast an eye into a certain shop, that he may judge himself of the respectability of some of his correspondents. The pages of the "Gazette" should not be stained by such things.

The letter of *Dr. Branson* is in type, and shall appear next week. Dr. Branson is a resident in *Sheffield*, and not in Cambridge.

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LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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ON THE

TREATMENT OF INCIPIENT PHTHISIS.*

By C. M. Durrant, M. D., Ipswich.

When we consider that the mortality produced by pulmonary consumption is estimated as at least one-fifth of the entire population of this country; when we again reflect on the frequently rapid progress of the disorder, producing either extensive tuberculous deposit, or softening and ulceration, and finally the formation of cavities; and when we also bear in mind, that at these stages of the affection the prospect of a cure is almost, if not entirely hopeless, surely we cannot devote too much attention to a subject on which humanity alone claims our most strenuous efforts.

That cavities in the lungs do occasionally collapse, become contracted, and at length cicatrized, is, though of rare and spontaneous occurrence, and contrary to the opinion recently advanced by M. Fournet, an unquestionable event, and one over which medicine, save as a palliative measure, can exert no control; nevertheless, in the incipient stage of phthisis, by an early and judicious combination of hygienic with medical treatment, the practitioner may, in not a few instances, if not entirely remove, at least suspend, the disease, and "by correcting the constitutional malady," prevent the further deposition of tuberculous matter.

It being the intention of the author to confine his observations within strictly practical limits, suffice it to remark, in reference to the pathology of the disease, that he is disposed to coincide with the views of Dr. Carswell, in believing that tuberculous matter is an unorganisable product, eliminated from the blood, and deposited principally on the free surfaces of mucous and serous membranes and cellular tissue, claiming the first as its special habitat. "There," says Dr. Carswell, "as into the great emunctory of the system, it appears to be separated from the blood, and becomes visible to us under a variety of forms." Reasoning on the analogy that, under the influence of certain remedies, scrofulous deposits in other parts of the body besides the lungs are occasionally absorbed, or at least rendered inactive and harmless, there appears no satisfactory reason to imagine that similar matter deposited in the lungs should not be equally capable of removal, or at least of being rendered innocuous.

Prior to the consideration of the varied remedies usually had recourse to in the treatment of incipient phthisis, it will probably be more expedient to reduce under separate heads the most common forms assumed by the disease, and at the same time cursorily glance at the physical diagnosis of each variety.

Perhaps the most frequent character in which the earlier symptoms of tuberculous deposit become apparent, is that in which the disease assumes a chronic state. The patient applies for relief for cough and emaciation, together with a train of dyspeptic symptoms, so common an attendant on this variety of the disease, whether of hereditary or acquired origin. On exposing the chest we are frequently enabled to detect a deficient or unequal expansion of the superior ribs, especially apparent during a deep inspiration, and which evidence is frequently increased by applying the expanded hands to the corresponding sides below each clavicle. To the above sign may be added, a sinking or flattening of either infraclavicular region, which, as a corroborative test, may prove an indication of no mean value. The inspiratory murmur will be found diminished in intensity, or more frequently changed in character, becoming rough, hoarse, and dry, while the expiratory sound is often increased both in duration and intensity—so much so, indeed, in some cases, as entirely to mask the natural vesicular murmur.

Increased resonance of the voice and cough, ascertained by comparative examination of the two sides of the chest, though by no means a constant indication, proves when present an additional source of assistance in forming a correct diagnosis. The value of percussion, in its negative result, is by no means so important as a diagnostic sign of incipient phthisis, as the phenomena furnished by auscultation and inspection; still, however, when dulness does exist, or when a marked difference in the character of the sound is elicited by careful comparative percussion, it becomes a valuable auxiliary, and corroborates in an especial manner the conclusions already deduced.

There is another form in which incipient phthisis not unfrequently obtains—viz., as coexisting with, and often hidden to a certain extent by, bronchitis. In this case the patient, already presenting well marked indications of the scrofulous diathesis, finds, after one or more attacks of ordinary cold, that his cough is persistent, with frothy mucous sputa, vague, dull, heavy pains in the chest, especially at the sides, beneath the clavicles, and extending backwards between the scapulæ, with hurried respiration, and more or less febrile excitement. In addition to the already detailed auscultatory phenomena, we often detect at the apex of the lung, during inspiration only, a fine mucous crackling, sometimes inaudible for a few seconds, or more rarely hours, and again returning, or its sound supplied by an occasional solitary click, produced by the bursting of a single mucous bubble. These latter signs, though they are sometimes audible during ordinary respiration, yet more often require a forced inspiration for their perfect development, and thus not unfrequently escape the attention of the superficial observer. Attention is sometimes directed to the chest for the first time, by the occurrence of hæmoptysis, when, on a careful examination, we detect, to-

* Abstract of a paper read at the anniversary meeting of the Eastern Branch of the Medical Association held at Ipswich, June 17th, 1842.

gether with general symptoms, many of the physical signs of the disease. In some instances after hæmorrhage, as first noticed by Dr. Wm. Stokes, no râle whatever is audible; this fact has been proved by that acute observer to depend upon the obstruction of the minute tubes by coagula. In those melancholy cases of acute phthisis, popularly designated galloping consumption, the stages of malady so rapidly succeed and run into each other, that, with a knowledge of the signs already detailed, we shall rarely fail to detect, though, alas! too seldom will it be in our power even to retard the fatal progress of the complaint. If, then, to sum up shortly, we find in the same individual, short dry cough, of more or less duration, whether following an inflammatory attack of the chest, or of uncertain origin—or accompanied with clear mucous expectoration, with or without hæmoptysis—with dull heavy pains in the chest or back—and if, in addition to these general symptoms, we have insufficient expansion or flattening of either infraclavicular region, together with permanent feebleness or hoarseness of the natural respiratory murmur—and especially if the expiratory sound be prolonged and increased in intensity—and lastly, if with these there exists the fine mucous rattle, audible either beneath the clavicles, in the axilla, or in the acromial or supra-spinous regions, while the remainder of the lung remains free, even though the voice and cough, together with the sound on percussion be not materially modified—we may doubtless predict with much confidence the presence of unsoftened tubercles. This opinion will of course be more strongly confirmed should the patient, in addition to the coexistence or successive appearance of some or all of the above symptoms, possess an hereditary or acquired phthisical predisposition.

In the treatment of phthisis pulmonalis, perhaps no remedy has canvassed the opinions of medical men more than bleeding. Among its advocates are included many authors of the last as well as the present century, some of whom, acting under the impression of various preconceived theories, carried the practice to a very great extent. Like many other remedies, however, which have been proposed in this affection, the abuse, rather than the adoption of depletion, has, from the earliest period, given rise to the most conflicting opinions.

Viewing phthisis not as inflammatory in itself, but as peculiarly liable to excite that condition in the surrounding tissues, the author is disposed to limit the use of general blood-letting (and then only in small quantity, and seldom repeated) to such cases as clearly indicate signs of plethora, pulmonary congestion, inflammation, or hæmorrhage.

Laennec, speaking of bleeding in phthisis, says, "It ought never to be employed, except to remove inflammation or active determinations of blood, with which the disease may be complicated; beyond this, its operation can only tend to a useless loss of strength."

In a note by Dr. Forbes (to whom the profession is much indebted for first pointing out the importance of investigating the earliest changes in the respiration in phthisis, with a view to treatment), we read, "I have seen blood-letting much employed, and have myself used it much in this disease. I have seen great benefit derived from it, but chiefly in relieving the inflammatory complications of phthisis. With our present knowledge of its pathology, it can hardly be expected to benefit the tuberculous affection, and my experience leads me to condemn its use in every case of pure phthisis."

Having, however, subdued pulmonary congestion, &c., by small general blood-lettings, the adoption of local depletion, by leeches or cupping, may be most advantageously substituted, especially in those cases in which coexisting bronchitis, hæmoptysis, or pneumonic consolidation resulting from tuberculous deposits, still remain. According to the author's own experience, the application of six or eight leeches below one or both clavicles, or the withdrawal of four or five ounces of blood from between the scapulæ, by cupping, has afforded, in the majority of instances, greater and more permanent relief than general venesection.

It is in the bronchitic and hæmoptysical varieties of incipient phthisis that small, general, or, what is better, repeated local depletions, so frequently prove of such marked benefit in relieving many of the more prominently distressing symptoms of the malady; while in the chronic form, even topical depletion is seldom necessary, save to remove accidental complications, or check the further secretion of tuberculous matter.

Another important means, both as a palliative and also as a frequent preventive to the increased deposition of tubercles, is counter-irritation.

Many have been the forms proposed, and great has been the testimony, in favour of the adoption of this remedy. From a tolerably extended observation of the comparative amount of benefit derived from the use of different counter-irritants, the author is disposed to place the greatest reliance on the timely application of blisters, and the turpentine and acetic acid liniment presently to be noticed. If, however, much febrile excitement attend the disease, it will be advisable in all cases to avoid the application of blisters, until after its removal by appropriate general or local depletory measures; otherwise, they not unfrequently increase the evil they are intended to remove; always bearing in mind that, in this disease, the less the irritation produced, the greater will be the benefit derived.

Small blisters below the entire length of the clavicles, and repeated from time to time, operate very favorably; but should dyspnœa be urgent, a large blister over the sternum seldom fails in affording marked relief. With a view to excite and keep up a moderate degree of counter-irritation, and at the same time to render the skin less easily affected by atmospheric changes and external impressions, the author has found no application so useful and so manageable as a liniment of turpentine and acetic acid, first proposed by Dr. Stokes, and since strongly advocated by Dr. Hughes. The latter author adopts a formula, which, for extemporaneous prescription, answers the purpose remarkably well—viz., one ounce of strong acetic acid and two ounces of the oil of turpentine simply shaken together. The original formula of Dr. Stokes, though more elegant, is not more effectual. After applying this remedy freely to the chest night and morning for a few days, patients have often expressed themselves in almost enthusiastic terms of the

relief afforded. The various lotions containing vinegar, alcohol, ammonia, mustard, &c., from time to time recommended, are all much inferior to the above. Tartar emetic, either in the form of ointment or solution, proves a useful, though, in chronic cases, by no means so decidedly an effectual remedy as the turpentine and acetic acid liniment. Croton oil and ammonia have been held in considerable repute, and certainly fulfil the intention, especially as applications to the larynx and trachea.

Issues, setons, moxa, and even the actual cautery, have severally found their advocates; of the two latter, from their painful application, and the great irritation they inevitably produce, no further mention is necessary. The insertion of setons or issues is, to a certain extent, open to similar objections; nevertheless, a seton, introduced alternately in each arm, and allowed to heal, will be a prudent course, especially at the age of puberty, in all cases, whenever, from hereditary or acquired predisposition, an attack of phthisis is apprehended.

Since the publication of Sir James Clark's valuable Treatise on Consumption, the practice of treating incipient phthisis by frequently repeated emetics has lately been revived, with a prospect, if persevered in, of beneficial results. The testimony of the numerous authors in the last century in favor of the above practice, valuable as is their authority, must not be received without due limitation. The uncertain knowledge that then existed in detecting incipient phthisis, and the imperfect manner in which the pathology of mucous membrane and its secretion was at that time understood, renders it exceedingly probable that the majority of cases reported as relieved, or even cured, were not phthisis, but chronic bronchitis. One fact, however, is unquestionably proved—viz., that emetics may be administered for months, or even years, not only without injury, but with evident advantage, the appetite improving, the complexion becoming clear, and the patient gaining both flesh and strength under their continued use.

The *modus operandi* of this remedy is, probably, twofold—partly mechanical, by dislodging the tuberculous matter, and at the same time preventing its increase, and partly general, by giving a shock to the whole system, thereby improving the secretions, and restoring the due balance in the circulation. The author has had an opportunity of watching many well-marked cases of incipient consumption, in which the repeated exhibition of emetics has afforded the greatest benefit, more especially in relieving, and often entirely removing, the cough and dyspnœa, together with the pain and oppressive uneasiness in the chest, so frequently complained of in this disease. The cases best adapted for their continued use are the chronic.

In those instances in which bronchitis or hæmoptysis coexist, these should first be removed by appropriate treatment, and then the emetic plan may be adopted. In the acute form of the disease, if detected very early, emetics may be tried, but, like most other remedies, will too often be found hopeless.

The emetic which has in general fulfilled every intention, causing vomiting to occur twice or thrice, has been twelve grains of powdered ipecacuanha, taken an hour before breakfast, and repeated daily or less frequently, according to the peculiar exigencies of the case. A wineglassful of cold camomile infusion, taken immediately the vomiting has ceased, imparts tone to the stomach, and prevents the distressing nausea which sometimes succeeds its operation. Dr. Witt, of Bedford, in reply to a letter from Sir James Clark, requesting his experience of the use of emetics, observes, "It has fallen to my lot in our infirmary here, for the last seven years, to have the management of a multitude of pulmonary cases, and, when I have been successful, I have, in my own mind, attributed that success mainly to the unsparing and persevering use of emetics."

In the selection of proper cases for the emetic treatment, some care and circumspection are necessary, as also the premisal of appropriate remedies for the removal of gastric irritation, or other existing symptoms contraindicating their employment.

The remedy which, perhaps, of all others in the treatment of incipient consumption, is at the present time undergoing the most extensive trial, is iodine.

From the palpable effects which this substance exerts in the removal of enlarged glands, and scrofulous deposits in various parts of the body, which latter, in their nature, do not apparently differ from the tuberculous, and from the very favorable testimony of several authors, founded on extensive trials of the remedy, the use of iodine and its preparations, in the treatment of incipient phthisis, may unquestionably claim the fairest consideration. The iodide of potassium, in doses of two or three grains three times a-day, in any light infusion, is the form in which the remedy generally agrees best; should a more tonic effect be required, the iodide of iron may be advantageously substituted.

The operation of this medicine is very slow, but acting, as it does, on the hepatic, renal, and uterine functions, the general health of the majority of patients rarely fails to improve under its use; and if the morbid deposit in the lungs be limited, the probability, in many cases, of its absorption is by no means chimerical.

The employment of sedatives, however valuable as a palliative measure in the more advanced stages of the malady, in its incipient condition are seldom of much avail, save in diminishing the irritation of the cough, and occasionally in procuring rest. The hydrocyanic acid does not appear to have sustained the reputation in the treatment of phthisis which its advocates at first raised in its favour; nevertheless, in combination with morphia or conium, it is sometimes exceedingly useful in quieting the paroxysmal cough, which often, even at the commencement of the disease, proves so harassing and wearing to the sufferer. Digitalis may be advantageously prescribed in those cases of phthisis coexisting with cardiac affection, and especially if the habit be phlegmatic. The effects, however, of this remedy must be carefully watched, since, by deranging the gastric and alvine functions, and permanently reducing the force of the circulation, the constitution will be thereby injured, and the disposition to deposit tuberculous matter in consequence increased. Perhaps on the whole, when a sedative is required, the salts of morphia may be esteemed the most useful. In the inflammatory complications of the complaint, the tartrate of antimony, in combination with a sedative, will operate beneficially; but,

from its liability to disorder the stomach and bowels, its use should be discontinued immediately the inflammatory symptoms have been subdued.

The exhibition of mercury in phthisis, save as an alterative, or in combination as a mild aperient, has been considered by the greater number of authors as decidedly injurious. More recently, however, the attention of the profession has been ably directed to the subject by Sir Henry Marsh, Dr. Graves, and Dr. William Stokes, of Dublin, and still more lately in an interesting paper on the treatment of incipient phthisis by mercury, by Dr. Munk, published in the "Medical Gazette" for October, 1840. The form of the disease best adapted for the mercurial treatment is that in which the symptoms present more or less of an inflammatory character. In these cases, by the judicious use of mercury, the irritation of the pulmonary mucous membrane and parenchyma may be removed, the deposition of tuberculous matter probably arrested, and thus, by the suspension of local action, time is gained for the adoption of other remedies, and the improvement of the general health.

In the following case the benefit derived from slight salivation was so great, and the symptoms of the disease so well developed, that a brief detail of its history, from short notes taken at the time, may not prove uninteresting. The patient, a married woman aged, 30, the mother of six children (all of whom died shortly after birth), by occupation a laundress. For some months previous to application she had been the subject of severe and harassing cough, with muco-purulent expectoration, often clotted and occasionaly streaked with blood; considerable dyspnœa; cardiac palpitation; profuse morning perspirations; pain in left side and below the scapulæ, with wandering pains about the shoulders; complexion sallow; pulse 94, small; tongue moist, slightly coated; appetite bad; no thirst; bowels confined; urine diminished in quantity, otherwise natural; catamenial discharge always irregular, had not then appeared for ten weeks; believed herself pregnant; legs and thighs œdematous. To the above were added, disturbed and restless nights, with great emaciation and loss of strength.

On examining the chest the heart-sounds were normal, the rythm quick and jerking; there existed slight dulness on percussion beneath the right clavicle, at which spot the respiration was more feeble than on the opposite side, accompanied with a fine muco-crepitating rhoncus, and from time to time, on a deep inspiration, the single click, already alluded to, arising from the bursting of a solitary mucous bubble, was distinctly audible. Below the right clavicle, the vesicular murmur was hoarse and rough, while the expiratory sound was considerably increased in intensity.

The above case appearing eminently calculated for a fair trial of the mercurial treatment, after premising local depletion and aperients, blue pill was prescribed in grain doses three times a day; this speedily excited mild salivation, which was gently kept up for some days. Under this treatment the symptoms rapidly disappeared, the only physical sign remaining being a slight hoarseness in the respiration. Occasional mild aperients, and the diluted sulphuric acid, completed the cure, since which she has given birth to a healthy living child, a twelvemonth after which she remained perfectly free from pectoral complaint.

From the undoubted testimony and high talent of the authors above mentioned, and from the numerous well marked cases which they have detailed, little question can exist but that in some cases of incipient consumption the production of ptyalism is attended with the happiest result; still with mercury, as with emetics, extensive numerical investigations are required before either plan of treatment can be considered as established.

In reference to the adoption of the former, the precaution of Dr. Stokes should never be lost sight of—viz., "that the remedy is a two-edged sword, and its exhibition must not be lightly attempted."

Of the utility of inhalation, as a remedy in incipient consumption, the author's own experience is very limited. Like the majority of curative measures, it has its advocates and its opponents, and on weighing the testimony of each, it is extremely probable, that, by judicious management, where there exists little disposition to inflammatory action, it will prove a useful adjunct to the therapeutics of pulmonary disorders. Sir Charles Scudamore strongly recommends a mixture of iodine with conium, inhaled from a glass apparatus with large tubes, by which treatment, combined with general measures, he reports that he has effected several cures.

Dr. Corrigan prefers the impregnation of the patient's room with iodine. Perhaps the most ingenious and economical method of introducing this substance into the system by inhalation, is that lately proposed by Dr. Leigh, of Jersey, who directs the patient to apply a sufficient quantity of iodine ointment on the ribs, under both axillæ, and then, by covering the head with the bed-clothes, to inhale the iodine that is volatilised by the heat of the patient's body. This practice might be advantageously adopted in hospitals, and as the ointment produces counter-irritation, its simultaneous application below the clavicles may be further suggested.

M. Latour has strongly advocated the employment of common sea salt in the treatment of pulmonary consumption, and scrofulous diseases generally. The circumstance that the occurrence of phthisis is almost unknown in those countries in which saline matter forms so large a proportion of the soil, and even incrustates the walls of the houses, probably first induced M. Latour to adopt this mode of treatment. In so fatal a disease as phthisis pulmonalis, no remedy (however unlikely from preconceived theory to prove useful, unless it be decidedly charlatanical) should be hastily laid aside by the practical physician without fair trial.

M. Coster, from the result of experiments on animals, endeavours to prove in a letter addressed to the Royal Academy of Medicine, that by the free exhibition of carbonate of iron, not only may the predisposition to the disease be prevented, but also in very many cases the progress of tubercles arrested.

After the removal of local irritation, and the more prominent general symptoms caused by the presence of tubercles, the free exhibition of tonic remedies may be advantageously had recourse to. Of these, the preparations of iron and the sulphate of quinine, are to be preferred. Among the best tonics in commencing consumption may be included—a diet, at once nutritious and easy of digestion; a residence where the air

is mild and dry, with daily gentle exercise, avoiding over-exertion and fatigue, the best of which, by far, when attainable, is that derived from horse exercise. Sailing on the sea, when moderately agitated, if it do not excite too great nausea, is an admirable remedy in the early stage of the complaint; in fact, cruising round the coast at repeated short intervals, by avoiding the inevitable ennui, consequent on a protracted sea expedition, is preferable to a voyage to a more distant, though, as it too frequently proves, to the unfortunate patient, less happy land.

Travelling (provided the circumstances of the invalid admit of the comforts of home, combined with the strictest regard to the improvement of the general health), by varying the air and scene, and allowing habitual exposure to its invigorating influence, and thereby tranquillising the mind, proves in many cases a useful auxiliary.

In the winter months a leather waistcoat, worn over thin flannel during the day, may be prudently and advantageously recommended to those, who, either from natural or acquired susceptibility, are more or less prone to the disease.

Having completed the review of the several remedies which, under the author's personal observation, have proved from time to time, according to the peculiar features of the case, of decided benefit, he cannot conclude without strenuously urging the incalculable importance of investigating the earliest and most incipient threatenings of the disease. On this subject Sir James Clark graphically remarks, "It is too often far advanced when the patient is said to be threatened with it, and tracheal or bronchial irritation are the terms employed to account for symptoms which a closer investigation would trace to a deeper source. We must not be satisfied with a few slovenly thumps on the upper part of the chest, or even with the use of the ear or stethoscope for a few moments, applied as if we were afraid, rather than desirous of ascertaining the real condition of the lungs. Such superficial examination, if it deserve the name, is worse than useless; with the semblance of doing something, it really effects nothing, unless it be to deceive the patient and his friends, and bring this method of diagnosis into unmerited disrepute." "Nature will not be thus interrogated; her operations must be closely observed, and studied with attention, before we can hope rightly to interpret them."

OVARIAN DROPSY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you think the accompanying case worthy of notice, I shall be much obliged by your inserting it in your valuable Journal.

I am, Gentlemen,
Yours, very truly,
ROBERT STORRS.

Doncaster, Aug. 25, 1842.

The following case of ovarian dropsy occurred in my practice several years ago; and, as it was somewhat peculiar, it may, perhaps, prove both interesting and instructive to the junior practitioner, who is apt to be too sanguine in the performance of an operation, or in the diagnosis of a case, and is too frequently unprepared for any unexpected or unforeseen occurrence which may perhaps arise, where he had been led to expect all as clear as he had been accustomed to read of in books, or in the graphic descriptions of a favorite lecturer. I had often heard the late Sir Astley Cooper describe an operation of this sort, where the operator coolly turned round on the assembled pupils, and pronounced it a case of dry tapping; but I little expected that the first case of the kind I should be called on to operate in would prove exactly similar.

In the year 1833 I was consulted by Sarah Firth, aged 42, of Sprotborough, near this town, who had for some months been becoming gradually emaciated, with an enlarged and increasing abdomen, which had then become immensely distended, with very evident fluctuation, which was distinguishable even through her clothes; there was considerable anasarca of the legs; distressing sickness; costiveness and purging alternately; menstruation regular, though less than when in health; tongue red; countenance anxious; pulse quick and weak. The swelling of the abdomen, she says, commenced on the right side, many months ago. The various sorts of treatment I adopted afforded no relief, except what she derived from severe purging, which somewhat abated the distension. She would not, however, consent to have the fluid evacuated until the distension was so great that the abdomen was quite tender to the touch, and she was occasionally delirious from the pain. My friend, Dr. Scholfield, who saw her with me, concurred in the propriety of the operation, and was with me on its performance, which took place November 5, 1833. On my withdrawing the trocar, to my surprise, not a drop of fluid passed through the canula, but at length, by pressure, and by repeatedly passing a probe through the canula, about a pint of gelatinous fluid was obtained; her weariness then became so great that we were obliged to desist. Nothing escaped from the puncture when the canula was withdrawn, and the puncture was merely covered with a strip of adhesive plaster. She continued much in the same state for some days, the distress from distention becoming more and more severe.

On the 12th I had just seen her, when I was again sent for in a hurry, and found that she had got relief from the opening made by the trocar, through which a large quantity of fluid had now come; it was partly gelatinous and partly serous, and escaped with great difficulty. I dilated the opening by means of a small piece of sponge, and obtained about a gallon more of semifluid. On the following day she felt so much relieved that she was anxious to have this repeated, which was done. After this the fluid escaped by degrees. The sickness continued; the bowels could not be emptied by purgatives; the mucous membrane of the tongue and mouth became aphthous; vomiting incessant; and she gradually sank, and died November 20th.

On the next day the body was opened by Dr. Scholfield and myself, and the following appearances were observed. A considerable quantity of semipurulent fluid in the cavity of the abdomen, the parietes of which were lined by loose lymph. On the right side was a large ovarian sac, containing a con-

siderable quantity of gelatinous matter, and several small hydatids, and at the bottom of the sac was a large tumor filling the greater part of the pelvis, and containing a large quantity of fatty matter, some hair, and a quantity of shapeless bones. The uterus was hard, and pushed forwards by the tumor; the bladder was capacious and natural; the rectum empty, and the colon distended with scybalæ from the tumor pressing on the rectum, and preventing the passage of solid fæces; the other intestines were natural. The liver was paler than usual, but not much altered in texture; the remaining viscera were healthy, except the stomach, which was considerably inflamed, and the left ureter was also considerably enlarged. There was a considerable quantity of bloody serum in the pericardium, otherwise all the viscera of the thorax were healthy. On a more minute inspection of the contents of the tumor at home, three teeth were found, each complete of its kind—viz., one incisor, one bicuspid, and one molar tooth. The preparation I have now in my possession.

CASE OF COMPOUND FRACTURE, IN WHICH REUNION WAS INTERRUPTED BY GESTATION.

By H. R. Oswald, Esq., Surgeon.

Several reasons induce me to consider the following case of compound fracture of the bones of the leg worth recording, and to place it at your disposal.

A compound fracture is at all times a dangerous injury, but this case is uncommonly interesting from considerable portions of the tibia having been removed at the first dressing, and from the fact that it occurred during the eighth month of pregnancy, and furnished a satisfactory proof that a fracture during pregnancy does not reunite till after gestation has been completed; and even after that period is past, remains long flexible, and deficient in hardness and strength.

On August 27, 1839, Mrs. R——, aged twenty-eight, and a native of the West Indies, in excellent health, received, whilst sitting in a gig, a kick from a vicious horse, which fractured both the bones of the right leg about their middle part. I visited this lady immediately after the accident, and found the foot and ankle doubled outwards, and a spicula of bone protruding through the thin integuments that cover the shin. This spicula was a loose portion of the lower end of the fractured tibia, and was surrounded with other loose and comminuted portions of the same end. The discharge of blood was inconsiderable, and swelling and reaction had only just commenced when I arrived; but owing to the importance of the case, and its occurring in a female large in the family way, I requested a consultation, and Mr. Garrett, of Douglas, was soon with me. We agreed to remove the loose and comminuted portions of bone, and consequently the wound of the integuments was immediately enlarged, and two fragments, consisting of the outer solid plate of the anterior surface of the tibia, one an inch, the other one inch and a half in length, besides other smaller portions, were removed. The limb was then extended to its proper position, and carefully set in a smoothly scooped wooden splint, without any bandaging whatever, the splint being only secured on a pillow, moulded into a form which embedded it; water dressings were then applied, and assiduously persevered in for many days.

During the first week of the case, Mr. Edward Thompson and Mr. Stubbs, of Liverpool, who happened to be in the island, visited our patient, and were much pleased with the appearance of the wound, the position of the limb, and the general state of the case. Indeed, the very moderate degree of reaction, and the absence of constitutional as well as of local irritation and pain in the limb, were, from the first day, very remarkable, and I never saw a case so free of them. The consequences were, we had no difficulty in keeping the limb in position, and the case went on beautifully under the use of the water dressings and the usual attention to diet and regimen. Though I dreaded the formation of abscesses where the broken ends of the bones had caused considerable injury to the soft parts of the calf of the leg, and in the large cavity out of which the comminuted portions of the tibia had been dissected, yet none such took place. The wound digested kindly, and symptoms of the adhesive process, and of granulations filling up the cavity, were strikingly remarkable towards the close of the second week; and the tumefaction of the whole limb, which had been considerable, began to subside, and pit on pressure about the fourteenth day. It was, therefore, bandaged by the many-tailed bandage, and a portion of spirits added to the water dressings; a more generous diet was prescribed by allowing an addition of an egg or a slice of ham to breakfast, and a cutlet of meat or a basin of broth at dinner.

On the 23rd of September, being twenty-eight days after the accident, we removed the leg out of the splint for the first time, and found, as we suspected would be the case, the fracture quite flexible, as much so as it was on the first day. On examining the site where the callus ought to have been formed, we found the whole space soft and pulpy. The external wound, which had never given us any trouble, was now filled up and healed to the size of half an inch or less, and the swelling of the limb almost quite gone. The newly-formed cicatrix seemed to cover a large mass of granulations. There was no puriform discharge of any consequence, nor any sinus leading to deep-seated cavities; but no progress had been made to reunion by bone, and we were under the necessity of being as careful in keeping the fracture in position as we were the first day it occurred. The many-tailed bandage was again applied, and, as labor was now daily expected, the limb was more firmly secured by splints all round. It may be remarked that, after the first week to the end of September, our patient suffered three exacerbations of fever of an aguish character, with intervals of eight days between each, but which produced no bad consequences beyond the uneasy sensations and loss of appetite for two or three days, which usually attend such attacks. On inquiry, I learned she had formerly suffered from ague, and considered that the present return of it was owing to the exhalations from the low meadow lands, and the streams of water which surrounded the cottage she occupied.

On the 28th of September labor set in very natu-

rally, and she was safely delivered of her first child, after a very regular and steady labor of eight hours.

October 1. Case doing very well. Opened the dressings to-day; fracture quite flexible. On rotating the foot, the substance that occupies the site of the callus exhibits a pulpy movement.

4. Any attempt to suckle the child strictly forbidden, to the great grief and annoyance of the mother. Febrile reaction, and other sequelæ of parturition, give no trouble; complains now more of pain in the fracture than before; she describes the pain as a palpitating and lancinating soreness.

11. Wound cicatrised; fracture still flexible, but feels rather stiffer and firmer in the deep-seated parts of the limb, as if from a degree of reunion in the fracture of the fibula; callus is so pulpy that it appears to fluctuate to the touch. Some change in the position of the leg has occurred, for the toes are more turned outwards than natural. Applied the splints with still greater care to accuracy. Continue a generous diet, and let her have a glass of port wine or of porter twice a-day.

25. Callosity of fracture considerably increased since last dressing, which took place twelve days ago. An ossific firmness is perceptible to the touch in the proper site of the callus. Our patient is in good health and excellent spirits, but thin almost to emaciation.

November 6. Leg still bends at the fracture, but will not rotate now.

16. Though the callus still bends slightly, it is stiff and elastic.

December 5. There is now a prominent node of bone formed where the loss of substance took place, and the leg will not now bend.

Early in January, 1840, reunion was so complete that our patient began to walk a few steps with the aid of crutches; but, for many months after, we took care to give the limb all the support that well-adapted splints could afford it, for I have on several occasions known a well-cured fracture disfigured by using the limb.

June 10. The limb is quite straight and precisely the same in length as the other; and I am happy to say the cure may be considered complete, for our patient can now walk several hundred yards without the aid of a stick, but says she could not walk any distance, for she gets so soon tired.

The foregoing facts appear to me to establish the old observation, that fractures will not reunite during pregnancy. I never before the present occasion had an opportunity of verifying this fact. Fractures during pregnancy are so rare, or are so frequently followed by premature labor, that the opportunity of observing the phenomena is seldom met with. Indeed, I cannot recal to memory having ever seen a similar case recorded, nor of having seen the fact otherwise remarked upon, than as problematical; so far the present case is curious and valuable. There can be little doubt that the cause of the want of reunion in such cases must be the growth of the fœtus "in utero," and especially the growth of the bones of the fœtus giving rise to a demand for ossific matter prejudicial to the supply necessary for the reunion of the fracture. It was in accordance with this opinion that our patient was prevented from suckling her child, and I have no doubt that, had she been allowed to do so, reunion would have gone on very slowly, and perhaps would have passed into that state of structure which would have rendered an operation necessary at some future period, for the purpose of inducing a deposition of bone.

I do not think that the febrile attacks which occurred during the first three weeks could have had much effect in producing the phenomena above described. They were too ephemeral to be followed by consequences so important. The process of gestation and the great demand for ossific matter in the system of the mother must be considered the only causes of the slow formation of callus in such cases as this.

The absence of pain and the unusual exemption from local irritation and of suppuration which this case exhibited, is another feature of it worthy of notice. There must have been some physiological cause for this, and the excellent state of health which our patient enjoyed is not sufficient to account for it; for powerful reaction is the consequence of robust health in all accidents. The appearance of pain in the fracture after gestation was over, and which continued many weeks when the general health was in good condition, is a proof that the symptoms of pain and reaction did not depend upon any condition of good or ill health, but upon a specific process going on in the system at the time, and this process must have been gestation, for no sooner was it over than the sanative process commenced more efficiently in the fracture. It is curious to observe how the absence of local irritation and pain during gestation resulted in a very imperfect process of reunion, and how, as soon as delivery was accomplished, that pain became the concomitant of a sanitary process in the fracture, which resulted in complete reunion of the osseous structure, thus forming another illustration among many I have met with in my experience, that pain, unattended by fever, is by no means a bad symptom; on the contrary, it is often an indication that the vis medicatrix naturæ is in active operation.

Douglas, Isle of Man.

CASE OF CHOLERA MORBUS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—Should you consider a second case of cholera morbus, which has occurred in my practice since last I wrote to you, sufficiently interesting to merit a place in your Journal, I beg you will give it an early insertion. It may be, probably, interesting to those gentlemen who are engaged in collecting information on the endemics and epidemics of the current year, to know the particular situations where such diseases are most prevalent, and the mode of treatment most frequently successful.

I am, Gentlemen,

Yours obediently,

John Wickens West, M.R.C.S.L., &c. &c.

Poole, August 29, 1842.

Mrs. Corderoy, aged sixty, married, and the mother of a small family, usually experiencing good health, was attacked, during the night of Thursday last, the 25th instant, with violent pains in the epigastric region; cramp in the legs and arms, which was so

severe that she could not be kept in bed; constant vomiting and purging of a thin, gruel-like fluid. In the morning I was sent for, and found her sitting on *la chaise-percée*, violently purged, and in a state of extreme collapse; skin cold and clammy; pulse not perceptible at the wrists, and scarcely so at the carotids; breathing hardly observable; eyes sunken, and pupils contracted.

I immediately gave her an ounce of brandy, part of which was instantly vomited, and put her feet into hot water and mustard. These means seemed to restore animation, and I was encouraged to persevere. I ordered the following draught:—

Tincture of opium, forty drops;
Compound tincture of cinnamon, one drachm;
Camphor mixture, one ounce and a half. To be taken directly.

I left her better, but was soon requested to visit her again, and found her in the same collapsed state as before; purging; no pulse; and a universal death-like coldness; cramp in all her limbs.

I had her feet again placed in hot water, and her feet and legs well rubbed with mustard, and gave her a large tablespoonful of brandy every ten minutes. In about half an hour she was decidedly relieved, and her symptoms were more favorable.

I discontinued the brandy, and prescribed the following medicine:—

Calomel, two grains;
Opium, half a grain;
Aromatic confection sufficient to form a pill, to be taken every hour, with the following draught:—

Camphor mixture, one ounce;
Compound spirits of ammonia, half a drachm;
Compound tincture of cinnamon, one drachm.

Vespere: Her countenance has now lost the choleric aspect; tongue white; respiration more natural; surface of the body warm; pulse 70. She speaks distinctly, and feels easy and comfortable, and is able to describe the distressing situation in which she has been.

To continue the pills and mixture every four hours during the night.

August 27. Has passed a comfortable night, with the exception of occasional cramp in her legs; pulse 80; bowels not moved since yesterday.

To continue the mixture, and omit the pills.

28. Considerable improvement in all symptoms since the last report; has voided no stool; urine free; pulse 75. Ordered a rhubarb draught.

29. In every respect convalescent; bowels have been gently moved.

The above is another well-marked case of Asiatic cholera. The extreme state of collapse, the universal cramp, and the rice fluid vomiting and purging, constitute the chief pathognomonic characters. During the last fortnight I have witnessed several other cases of a much milder form. The disease has been ushered in simply by diarrhœa, with slight alvine pains, unattended by cramp or any other violent symptom. These have generally yielded to rhubarb with carbonate of soda, in the form of a mixture with peppermint water, and three grains of calomel, combined with ten grains of Dover's powder, every night.

The town of Poole presents nothing particular in its locality. It is not too thickly populated, and its inhabitants generally are cleanly. The soil is of a sandy nature, and epidemics seldom prevail to any extent either in the town or neighbourhood.

When the cholera was so prevalent in this country—about the year 1832, I believe—only one or two well-defined cases of the malignant form occurred, the others being such as I have just stated.

SEVERE HÆMORRHAGE FROM THE TONGUE.

By John Wickens West, M.R.C.S., &c., Poole.

The child of a respectable butcher and farmer, residing in the neighbourhood of Poole, fell down and bit the surface of its tongue, but the wound was so small, that it was scarcely discernible without great care. It bled so profusely, that the parents sent for a medical man, and the hæmorrhage was for a time arrested, but leaving the child in a debilitated state. Judicious internal remedies were likewise tried. During his absence from home the bleeding recurred, and I was immediately sent for; and hearing the caustic had been applied, I tried the tinctura ferri muriatis on lint, which for a time also succeeded; but the next day it again appeared with the same violence as before. I then determined to secure the tongue so as freely to apply the lunar caustic with a compress of lint, and in this I was successful; for although there was a slight return of it the next morning, it has been gradually on the decrease, and the child is now much stronger and improved in aspect, with every prospect of getting well.

There is another child in the same family, who had profuse hæmorrhage from a slight wound some time ago, and which was with difficulty arrested.

I mention these cases, showing what slight and apparently trivial causes will produce violent and alarming symptoms where the hæmorrhagic diathesis prevails. I would mention that both the father and mother of the child are particularly robust, healthy people, and possess no such disposition.

UNIVERSITY OF EDINBURGH.

TOWN COUNCIL PROCEEDINGS.

The council met on Tuesday—the Lord Provost in the chair.

Mr. Lothian protested against the accuracy of the minutes of August 9, in so far as they bore that Dr. Henderson was elected to the office of Professor of the Chair of Pathology in the University of Edinburgh. He farther protested that Dr. Craigie was duly elected to that office; and reserved to himself and the supporters of Dr. Craigie their relief at law.

Mr. Black said he had a motion to submit to the council with respect to the mode of voting in elections of professors; and he wished to bring it forward now, because, if allowed to lie over till next election, he would, no doubt, be met with the objection that it was wrong to bring it forward with respect to an election just about to take place. What he wished to propose was, that, at next election, they should have no double voting, but they should at once come to the vote, and that whoever was at the top of the poll should be de-

clared elected. (Cries of "No, no.") Mr. Black was proceeding to show the evils attending the practice of double voting, when he was persuaded by several members to defer going into the discussion of the subject just now, and give notice of a motion for next meeting, which he accordingly did.

PHYSIOLOGY CHAIR.

Letters from Dr. Allen Thomson and Dr. J. Hunter Lane, of Lancaster, were read, announcing themselves as candidates for the vacant chair of physiology.

Bailie Richardson stated that Dr. Reid, of St. Andrews, was also a candidate.—*Edinburgh Courant, August* 25.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, SEPTEMBER 3, 1842.

It is thought by some of the advocates for a reform of the abuses which disgrace the whole of our medical polity, that a revision of the system of education should form a part of any legislative measure which may be brought forwards to receive the sanction of Parliament. Some doubts may exist as to the expediency of such a course of proceeding, and warning may be taken from the error of the Apothecaries' Company, which, in consequence of being tied down by the act of 1815 to an injudicious measure of this description over which its members have no control, must ultimately suffer dissolution. But whatever may be the mode in which the subject of medical education is to be ultimately disposed of, it is of the first importance that the regulations adopted should be based upon correct principles. The system, or rather systems, at present pursued, though superior to those which formerly held possession of the schools, are yet faulty in many important particulars. Medical education has attained its present state of efficiency in some of the colleges and schools by gradual alterations introduced as called for by the increasing exigencies of advancing knowledge and intelligence. Like many other long-established forms and customs, the systems of medical education have become hallowed by usage, and their attendant disadvantages have been counterbalanced by much positive good. The time, however, is now arrived at which medical instruction, both in its nature and in the modes of its application, should be placed on a more consistent and comprehensive plan. Much that is now unnecessarily required may be dispensed with altogether; some subjects have received undue attention in proportion to their relative importance, and should, therefore, be kept within due limits; while further provision should be made for the cultivation of others which have been either altogether neglected, or not hitherto sufficiently studied. The first object of medical education is to prepare such a number of well-qualified practitioners for the public service as the wants of the community require. Medical practitioners well grounded in the principles of the profession, and capable of treating, as they arise, cases of disease, external or internal, are what are wanted for the care of the public health. To be an accomplished literary scholar, or an acute mathematician; to be well acquainted with botany or zoology, or even to be thoroughly instructed in chemistry, anatomy, and physiology; are of no avail if the practical application of these preliminary studies to the cultivator of medicine or surgery be wanting. Whatever importance, therefore, may attach to certain of these branches of knowledge, and we are far from underrating their value, they can be considered only as preparatory to the main object of qualifying the candidate for the due performance of his medical duties.

The questions to be determined are, first, what is essential for the medical practitioner to know; and secondly, in what manner is this essential knowledge to be acquired, so as to secure the attainment of it by the most effective means and in the most advantageous manner. The varied standard of attainment required by the different bodies at this time possessed of the privileges of granting degrees or diplomas in medicine and surgery, evidences the varying nature of the opinions entertained upon medical education. Some of these institutions look to a limited amount of practical knowledge only; others take a wider range, and require of their candidates a course of study which, by its extent and variety, has a manifest tendency to distract the attention from the main object, and to fritter away the time and intellectual powers upon a diversity of matters of very inferior moment. It cannot be doubted that both classical and mathematical acquirements are of the highest benefit to the future physician or surgeon, and that one or other of these branches of knowledge should form the basis upon which the superstructure of any liberal profession must be raised. The powers of the mind must be brought out, and while the faculties of observation and preception are exercised by the investigation of natural objects, those of memory, attention, and judgment ought to be called forth by early training in the acquisition of one or more languages, and the reasoning faculties developed by the study of some branch of mathematical inquiry. Still, this is but that preliminary education which every person intended to be devoted to intellectual pursuits, of whatever character, should undergo. To make it necessary, however, that the student of medicine should attain to the standard of a Porson in classical lore, or of an Herschel in the refinements of mathematical analysis, is to lose sight of the end in the acquirement of the means. A knowledge of certain of the modern languages, again, may be advantageous in enabling the practitioner to become acquainted with the stores

of knowledge which observers in foreign countries are daily collecting; but it may be questioned whether it is requisite in these days, when, by carefully executed translations and the aid of our many excellent periodical publications, so much of what is valuable in foreign literature is rapidly transferred to our own language, that every practitioner should be familiar with the Italian and Spanish, or even the more useful, though more difficult, German language.

The natural history of man, of which medicine, as a science, is a part, and upon a knowledge of which medicine, as a practical art, must be founded, requires for its due comprehension a knowledge of every other branch of natural science. Physics, or natural philosophy, chemistry, botany, and comparative anatomy, are each of them sciences which throw much light upon the structure and processes of the human body, both in health and disease. A knowledge of the principles of natural philosophy is necessary to enable us duly to comprehend the relations existing between the animal frame and the external physical agencies to which it is continually exposed.

The laws of mechanics are illustrated in its structure; and without a certain degree of acquaintance with those laws, the construction of the bony cavities and supports, the play of the joints, and the mechanism of muscular motion, are not to be understood. In like manner, hydrostatics, hydraulics, and pneumatics, become of importance in the explanation of the pressure and motion of the fluids of the body, and some of the phenomena of respiration. Optics and acoustics explain the laws of vision and hearing, and the adaptation of the organs for the reception of light and sound to the functions which they are destined to perform. Without an acquaintance with the laws of heat, light, and electricity, it is impossible to comprehend the analogies upon which the action of the nervous system is sometimes attempted to be explained, the phenomena attendant upon the generation of animal heat, &c., and many other operations of the human frame or its parts. In like manner, a knowledge of the principles of chemistry is essential to enable the medical philosopher to understand many of the changes which are going on in the organs and tissues of the body; the composition of the blood, chyle, lymph, milk, bile, urine, and other fluids, secreted or excrementitious; the action, at least in part, of the medicines which he prescribes, and their mutual relations in forming a judicious combination fitted to produce the required end. Natural philosophy and chemistry are, perhaps, of more importance to the general practitioner than either botany or comparative anatomy; but for those who have time and opportunity, or whose inclinations lead them to endeavour to extend the bounds of our knowledge by investigations into physiology and pathology, an intimate acquaintance with the structure and functions of both plants and animals is indispensable. It is not, however, imperative upon the general medical practitioner to be as deeply instructed in these subjects as a Biot, a Faraday, a Brown, or a Cuvier; it is not necessary that the time which he is required to devote to his medical education should be occupied in the acquirement of these sciences when subjects of far greater moment are pressing upon his attention. Natural philosophy and chemistry should both be taught, in relation to medical science especially, and might well be combined in one course. An outline of systematic botany might also be combined with materia medica; and a condensed view of structural and physiological botany, together with comparative anatomy, might form a part of the courses on anatomy and physiology. Anatomy, physiology, materia medica, and pharmacy, are the really preliminary branches of medical instruction, and cannot be studied effectually without including such a practical exposition of the principles of the natural sciences, and their relation to medicine, as is sufficient for the purposes of medical practice.

In their studies much time should be spent, and to acquire a sound and practical knowledge of them is the best introduction to the future contemplation of disease, in all its varied aspects, and to the due comprehension of the principles to be followed in its treatment. It is unnecessary to pursue these remarks farther, than to point out that the study of diseased actions, whether external or internal, is the proper object of the more advanced steps in medical education. Medical and surgical pathology and therapeutics, together with obstetric medicine, now require, and should receive, undivided attention. Public hygiene and medical jurisprudence,—a competent knowledge of which, under the present system of calling upon medical practitioners indiscriminately for evidence, are indispensable,—must also be left to the concluding period of the pupil's academical education.

But questions of no less importance arise as to the methods to be prescribed for the attainment of this knowledge. Those now followed are lectures of various kinds, practical instruction, and apprenticeship. The preliminary attainment of classical literature and mathematical science must be left to the choice and discretion of the parent; we must confine our remarks to the more purely medical branches. The system of teaching pharmacy by apprenticeship, it is now universally admitted, ought to be given up, as requiring the expenditure of too great portion of time for a very secondary purpose, which, after all, may be more readily and effectually attained by other means. Lectures may be considered as a substitute for reading; the subjects thus conveyed to the mind of the student being impressed more readily, perhaps, by the familiar style of illustration which a lecture admits of, while the quantity of information to be received at one time is regulated, and the whole science is gradually brought before the attention. Under the present system, how-

ever, too much time is spent in this mode of instruction, and too much is required of the student.

Lectures alone, however, are but a very inadequate substitute for other and better modes of gaining instruction. Without the aid of other means of instruction they have a tendency to repress rather than to encourage the powers of observation and reflection, and even at the best are only a method of looking at objects through another person's spectacles. When, however, they are kept within due limits, and employed chiefly as aids to more practical methods of attaining knowledge, they become of great utility in directing the student into the right train of thinking, in explaining to him what is not familiar, or suggesting to him subjects for reflection and study. Still, as an eminent author observes, lectures are but the means to an end. "The good anatomist is made what he is, not by attending lectures, but by his own labors in the dissecting-room. A knowledge of diseases, and of the mode of treatment, is obtained not from lectures, but from a diligent attendance in the wards of the hospital; from taking notes of cases, and thinking of them afterwards. In attending lectures the mind is merely passive. It receives knowledge, but when received it does little or nothing with it. But what is chiefly wanted to make a good practitioner, either in medicine or surgery, is, that he should have acquired the habit of observing, thinking, and acting for himself; and this is to be accomplished, not on the benches of the lecture-room, but in the wards of the hospital; when the student finds, not dull descriptions of disease, but disease itself in all its variety of forms, changing from day to day; where every bed tells an impressive history to those who are disposed to read it; and where the intellect is animated and sharpened by collision with the intellect of others." The province of the lecturer in every branch of knowledge which can be taught by practical instruction, is rather to exhibit and explain natural phenomena than to impress his own views. Hence the superior value of clinical lectures, and courses of practical chemistry, pharmacy, and anatomy. But, at the same time that every provision should be made for adequate medical instruction, we would not be understood to advocate the drawing of the reins of academical discipline so tight as to place the intelligent student in trammels, which, while they compel his attention to certain prescribed studies in a certain prescribed order, often prevent him from giving that free course to his natural talent which would enable him to arrive at the same end with more satisfaction, as well as with less labor to himself, or force on his mental faculties. The cultivators of medicine ought never to forget that some of the most eminent individuals, whose names are preserved in the records of their science, have been self-educated; and though it may not be desirable thus to leave the medical education of the many who are crowding into the portals of the profession to their own guidance, still the real test should be provided for in the examination. It is not the number of hours spent, but the number of hours well spent which should be ascertained. Academical regulations may require a compliance with certain stated forms, and may compel regular attendance upon lectures, but they cannot compel attention. Examination, therefore, although, as Dr. Macartney justly remarks, but an imperfect mode, *as commonly practised*, of testing a candidate's acquirements, is yet the only method upon which dependence can be placed. To make the examination practical, as is recommended by this distinguished teacher, and as, indeed, is actually done in many of the continental schools, is of far greater importance than to force a compulsory attendance upon long courses of lectures. It is also more likely to be effectual in inducing the previous acquirement of real knowledge, as the requisite acquaintance with the subjects thus practically tested can be obtained neither by the most diligent system of grinding, as it is called, nor by the sole aid of a retentive memory.

BIRMINGHAM PATHOLOGICAL SOCIETY.

July 2, 1842.

WILLIAM HENRY PARTRIDGE, Esq., in the Chair.

RECTO-VAGINAL TUMOR.

Mr. Sanders exhibited to the society a large recto-vaginal tumor, which had impeded labor, and had been taken from a patient of Mr. Bracy. The following is the history of the case:—

Mrs. S., aged thirty-five, the mother of three live children, at whose former labors, as far as could be learnt from the patient, nothing remarkable had been noticed, was taken, in the morning of the 27th of May, 1842, with slight labor pains, which continued until three o'clock in the afternoon, when the liquor amnii was discharged. As the pains increased in strength she sent for me, and I saw her about five o'clock, and found her in strong labor. On examination, I found the pelvis nearly filled with a firm substance, situated in front of the sacrum, extending upwards over the promontory, and diminishing the opening at the brim of the pelvis to about the space of two inches, above which the head of the fœtus was lying, the os uteri being dilated just sufficient to allow the introduction of the finger. The tumor felt firm and fleshy, but no fluctuation could be perceived, and on passing the finger up the rectum, it was found to be situated between it and the vagina.

The pains continued during the whole night, the head advancing very little, but the part of the tumor in the pelvis gradually diminished, and about eight in the morning the head began to descend, and the child was born alive at nine; about eighteen hours after the discharge of the liquor amnii the placenta was expelled in a short time without any unusual hæmorrhage, and on examination of the abdomen the uterus appeared firmly contracted, but projecting more than usual over the pubes.

The patient suffered much from after pains and exhaustion, but obtained some sleep the same night; the next day the pain increased, accompanied with extreme tenderness of the abdomen, which became tympanitic, and general collapse of the system, frequent vomiting, the pulse beating 140 in the minute. Leeches and blisters were applied to the abdomen, calomel and opium given, and the sickness restrained by laudanum; the bowels were regularly moved, and the discharge continued moderate. After about ten days the tympanitis disappeared, and the pain diminished, but shivering came on, followed by profuse perspiration, with difficulty of breathing and copious expectoration, and she died on the fourteenth day after delivery.

The body was examined twenty-four hours after death. The abdomen presented little appearance of disease except in the situation of the tumor; the intestines were free from adhesion; no effusion of lymph on the peritoneum, which appeared a little darker than usual; the uterus was nearly of the natural size, of a pale color externally; the ovaries healthy; the tumor was found to be attached to the vagina and back part of the neck of the uterus, rising up above the brim of the pelvis, projecting the uterus forward, and occupying the whole space between it and the sacrum, compressing the rectum, to which it was also closely attached. When cut into, it appeared of a pale yellow color, and the greater part of it of a medullary consistence, some parts being firmer and others broken down and surrounded by thin purulent matter, contained in a kind of cyst formed of condensed cellular membrane. It measured between eleven and twelve inches in circumference, and was of an oval shape, the longest diameter being from below upwards.

Mr. Sanders said that he saw the patient with Mr. Bracy, and examined her per anum and per vaginam, with a finger in each at the same time, previous to her delivery, and by pressing the fingers together had distinctly felt the tumor to be pushed upwards, which had induced him to recommend waiting before any important step was taken, and eventually the tumor did recede sufficiently to allow the child to be born; but he believed that the injury caused to the tumor by parturition had been the exciting cause of the patient's death.

The tumor appeared to him to be composed of four distinct cysts, and contained medullary matter in some parts, in others cheesy matter, and in some parts appeared in a state of suppuration.

The inflammation in the peritoneum, he said, did not appear to have been in accordance with the pain; for the membrane was only slightly thickened and discolored.

August 6, 1842.

GEORGE ELKINGTON, Esq., in the Chair.

DISEASE OF THE OVARY.

Dr. Fletcher exhibited to the society a diseased ovary, which had been sent to him by Mr. Thursfield of Bridgenorth, a member of the society, for presentation at the meeting; it measured about eleven inches in length and fifteen in circumference, and its interior was divided into eleven cysts by thick complete septa, of which three were principal, dividing it across into about three equal portions; the others were branches of these, and existed at the posterior or adherent side of the ovary; these cysts contained about five pints of clear albuminous fluid; it was accompanied by the following letter, which Dr. Fletcher read to the meeting.

"My dear Sir,—You will receive by the Bridgenorth coach to-morrow (Monday) a box, containing a diseased ovary and the abdominal contents of a woman, thirty-two years of age, who has been leading a mendicant life as the wife of an American sailor, and failed in her endeavour to begin a walk of fourteen miles about six weeks since. After resting a few days I tapped her, and took out about fourteen pints of bloody fluid, and then found that each ovary was diseased, apparently about half the size of the one sent. Her symptoms since that time have not been striking; she has taken moderately of food, complained but little of pain, and gradually sunk on Friday night, very much emaciated, *without* anasarca. On opening the abdomen last night, the peritoneum was thickened and hard as cartilage, so that a needle was passed through it with difficulty; the tumors were covered with coagulable lymph, so as to form a complete covering for them and prevent our discovering that there were two until it was removed; it was in some places an inch thick. They were attached by organised bands to the peritoneum in several places; on their removal there seemed to be no visceral contents in the abdomen; the liver, stomach, intestines, and spleen were nowhere to be seen, but a mass of something agglutinated and covered by coagulable lymph lying upon, and closely attached to the spine, lay not lower than the last dorsal vertebra.

In vain we searched for the stomach, or the liver; in vain to find the rectum, and the examination being secretly obtained we were obliged to tear and cut out the whole mass as I now send you, as no description could adequately convey the state the parts were in. The uterus was small, shrivelled, and imbedded in the same tissue, and the bladder was attached to the left tumor behind, and was accidentally punctured—at least so we think, as it was nowhere to be found. The diaphragm was pushed up on the right side, and the lung quite consolidated (hepatised), without tubercles, and the heart very small. Your's very truly,

William Thursfield."

Dr. Fletcher said he was very sorry that he had not been able to keep the contents of the abdomen as they were sent by Mr. Thursfield, more especially as scarcely any description could give an idea of their state. The peritoneum was very firm, and considerably thickened all over. The intestines and all other viscera were soldered together by adhesions of the peritoneum, and they appeared to be pulled from their proper situations by contractions of old bands, which had resulted from former attacks of peritonitis. He regretted the previous history of the woman was not before the meeting; he had hoped to have seen Mr. Thursfield there, but most probably she had been so irregular in her habits and locations, that nothing very definite could be obtained respecting her. It appeared to him to have been a very remarkable case of long continued peritoneal inflammation, by which thickening to a great extent, adhesions, and effusion had been caused, accompanied with encysted disease of the ovaries; and it well illustrated the fact, that most extensive and severely destructive disease could be borne by the system, when it was slow in its progress, a tenth or even a hundredth part of the amount of which would destroy life when the disease was acute.

HÆMOPTYSIS.

Dr. Fletcher then brought before the society the upper part of a right lung in which was a cavity, on the lining membrane of which vessels had been traced terminating in open mouths, by bristles passed into them, and read the following statement of the case, which had been given to him, with the specimen, by Mr. Clayton:—

"Daniel Rudge, aged seventeen, gun finisher, was received as a patient of Mr. Tarleton, July 21, 1842, with violent spitting of blood, which he had been subject to for some time, but which had recurred oftener latterly; he stated that he had spit as much as a pint the last night. He was ordered to take sulphuric acid with opium. Early on Friday morning I was called to see him, as he had again spit more than half a pint of blood; ten leeches were applied to the chest, and he was ordered to continue the same medicine.

July 23. There was a slight improvement, and he was admitted into the Infirmary, where he continued to improve, the phlegm he spit up being only streaked with blood, which continued up to the first of this month, when the violent spitting of blood returned in the night; he rallied during the next day, but the hæmorrhage again returning, he died on the night of the second.

Post Mortem Examination Thirty-two Hours after Death.

Body thin, not decomposed.

Head not examined.

Chest.—Old adhesions of both pleuræ, more on the right than left side; lungs studded with miliary tubercles; in the upper lobe of right lung there is a cavity, capable of containing a larged sized walnut, filled with a coagulum of blood. On its surface several open vessels are visible, some large and open belonging to the bronchi; others small and collapsed, which, on passing bristles from the pulmonary artery and vein, are found to be branches of these vessels terminating in open mouths upon the lining membrane of the cavity; another small cavity, filled with tubercular matter, was found near the same part of the lung. Heart healthy.

Abdomen.—Old adhesions of the peritoneum to the liver; all the other viscera healthy."

FUNGOID TUMOR.

Mr. George Elkington then brought before the meeting a fungoid tumor, which had formed in the right clavicle of a woman, aged seventy years. He stated that he was called to Mrs. D. on the 16th of March last, in consequence of her having accidentally discovered a small tumor upon the right clavicle. He stated that she was not conscious of its existence until an hour before he saw her, when, on putting her hand to her shoulder, she discovered it. The tumor at this time was about the size of a common chesnut, and of a similar shape, being somewhat triangular, with the angles rounded off; it was firm and inelastic, feeling like a morbid projection of bone; the integuments covering it were not discolored, and it was not painful, the patient being able to bear firm pressure upon it without inconvenience; it was situated at the junction of the inner and middle third of the clavicle, projecting a little backwards and inwards behind the clavicular attachment of the mastoid muscle, giving to the base of the tumor a lobulated appearance. There was also another projection of the tumor downwards towards the first rib; the whole of the clavicle unoccupied by the tumor appeared to be quite healthy. From this period the tumor gradually increased, at first very slowly, and latterly more rapidly; about two months after the first examination a distinct crepitus was felt on grasping the tumor with the thumb and finger, and at the same time moving the arm; or on making firm pressure upon the tumor. This was not attended with much pain, but about this time she complained of stiffness and occasional aching in the arm. About the middle of June the integuments on the summit of the tumor ulcerated, and afterwards a serous discharge was established, which was occasionally tinged with blood, and for the last six weeks she had occasional hæmorrhage, at some times to a considerable extent. As the ulceration extended, the surface of the tumor became slightly excavated, giving it a cupped appearance. She gradually sank, and died on the morning of the 29th of July.

Post-mortem Examination Seventy Hours after Death.

Body very emaciated; decomposition very little advanced. Two elliptical incisions were made through the integuments the whole length of the clavicle, which included the tumor. The clavicle was taken out at its articulations; the tumor was dissected out, and found to extend deep to near the subclavian vessels, which were laid bare by its removal, but did not appear to be compressed by it, or otherwise injured. The tumor measured nearly the whole length of the clavicle, and eight inches and a half in circumference. On making a section of the tumor the chief part of the clavicle was found completely destroyed, so that there was no trace of it in the structure of the tumor. Of the sternal end, only an inch and a half was left, and barely half an inch of the scapular end was remaining. The tumor appeared of the fungoid character, and to have commenced in the medullary and interstitial membrane; it presented a whitish appearance, and was about the consistence of hardened albumen, the cut surface being covered by a thick creamy fluid, mixed with small globules of oil, and similar in appearance to the medullary portion of the brain, when softened by decomposition. On examining its structure more minutely, the lower half appears to be of a cellular or reticulated character, and softer than the upper half, which appears to be more of a fibrous nature; it presents an appearance as if the lower half was formed by the expanded cellular tissue of the clavicle itself, whilst the upper half appears to be superadded to it. Detached studs of ossific matter exist all along the inferior boundary of the tumor, but no trace of bone is observed in any other part of it.

The chest and abdomen were opened; the pleuræ were thickened and puckered at the apices of both lungs, where, in the left, was a cavity about the size of a walnut, filled with white, inspissated, cretaceous matter; in the right, also, a cavity existed, about the size of a large filbert, which contained a small, hard, white substance, about the size of a small nut; the lining membrane of the cavity was scarcely to be detected.

All other viscera were healthy, except that the liver had been very much compressed by tight lacing.

WARTY EXCRESCENCE OF THE LARYNX.

Dr. Fletcher exhibited a larynx on which warty excrescences were attached to the whole length of the inferior cordæ vocales, so as almost entirely to block up the air passage. The trachea and thymus gland, which was enlarged, were attached to the specimen. It was taken from the body of a fine child, aged two years, Richard Wells, of Nechell's Green, who was brought to Dr. Fletcher as a patient April 18, 1842. He suffered from great difficulty of breathing, which was of a rough and croupy character in its inspiration, especially after any exertion or crying. His mother stated that it was first perceived when the child was about three months old, and had come on gradually; he had never spoken, and appeared to have no voice; he had been quite healthy with that exception; he had never had croup or any inflammation of the chest or windpipe.

On examination of the chest, there was found dulness on percussion over the upper half of the sternum, and the respiration was blowing in the same situation, so that an opinion was formed that the thymus gland was enlarged. All other contents of the chest appeared healthy on examination.

There appeared to be great obstruction in the trachea. The parents of the child are perfectly healthy, and it cannot be ascertained that they have either had any syphilitic affection. The treatment consisted in blisters to the upper part of the chest, small doses of iodide of potassium, and attending to the bowels.

The state of the child continued about the same, with little amelioration up to the 6th of June, when the respiration appeared somewhat better than usual. On the 8th he was taken with epileptic fits, when Mr. Cross was called in; he died on the 9th, and on the 10th Mr. Cross requested Dr. Fletcher to be present at the post-mortem examination, which was made at six o'clock, p.m., thirty hours after death.

The head was not permitted to be examined.

The lungs were congested, and the heart loaded with blood; the thymus gland was enlarged, being about a third more than its usual size at this age; the trachea was healthy, and the bronchi also. In the larynx, from the inferior cordæ vocales, a fringe of warty excrescences grew out, which, as nearly as possible, shut up the air passage in this situation.

The viscera of the abdomen were healthy.

The patient appeared to have died from asphyxia.

Dr. Fletcher said that he thought this might be an interesting case to the society; there were not many on record. Mr. Ryland, in his treatise on the Diseases of the Larynx, had mentioned all that Dr. F. had been able to find; and this differed from all of them, inasmuch as the growth here was confined to the line of the inferior vocal cords; but it was also interesting when considered in relation to the operation of tracheotomy.

ZOOLOGICAL SOCIETY OF LONDON.

August 9, 1842.

The following papers, by George Gulliver, F.R.S., of which we give brief extracts, were read:—

On the Blood Corpuscles of British Ophidian Reptiles; with some Remarks on the Shape of the Corpuscles of the Oviparous Vertebrata.

While the blood discs of the viper and of the snake have the most common elliptical shape, their length being rather less than twice their breadth, the discs of the slow-worm are peculiar in figure, since they are so much elongated that the ellipse is considerably more than twice the length of its breadth. The average size of the corpuscles was stated as follows, and the author took occasion to remark that all his microscopical measurements were invariably expressed in vulgar fractions of an English inch, however they might have been set up in type for the sake of convenience:—

	Long dia.	Short dia.
Slow-worm (*anguis fragilis*, Linn.)	$\frac{1}{1778}$	$\frac{1}{2666}$
Snake (*natrix torquata*, Ray) . .	$\frac{1}{1371}$	$\frac{1}{2157}$
Viper (*coluber berus*, Linn.) . .	$\frac{1}{1274}$	$\frac{1}{1800}$

The author remarked that, though the blood discs of birds and reptiles, when dried on glass, are generally somewhat smaller than in the wet state, the blood discs of mammalia, on the contrary, are almost always slightly larger when dried in the same manner, than when floating in their own serum, which he thinks may result from the greater delicacy and softness of the latter corpuscles, and which corpuscles he regards as more susceptible of contraction and modifications of form than the former. The envelopes of the blood corpuscles of fishes were stated to be remarkably delicate and evanescent.

Some time since, M. Mandl, who justly stated that all observers had agreed that the long diameter of the oval blood discs of vertebrate animals was never more than one and a half or twice the short diameter, described the corpuscles of the crocodilidæ as forming an exception to this rule, since he found that the corpuscles of *crocodilus lucius* have the form of a very elongated ellipse. Mr. Gulliver, however, ascertained that the blood discs of *crocodilus acutus*, and of *champsa fissipes*, were not thus elongated, but have the common elliptical form, as shown in the Proc. Zool. Soc., Nov. 10, 1840.

Subsequently Mr. Gulliver has shown that, though the usual figure of the blood discs of birds, &c., is an ellipse, of which the long diameter is from one and a half to twice the short diameter, there are many exceptions. In other words, the corpuscles may either be comparatively long and narrow, or short and broad; of the former shapes, the corpuscles of the snowy owl, passenger pigeon, great butcher bird, nightingale, and snow bunting, are examples; and the corpuscles of the Java sparrow and of some other granivorous birds, are examples of the latter shape. The measurements of the corpuscles of birds, in the author's appendix to Gerber's Anatomy, were referred to in illustration; and, as stated in the same place, in birds the nucleus of the blood disc is generally a more elongated ellipse, when exposed by acetic acid, than the unchanged envelope, though to this rule the author stated there were some exceptions, as in the common fowl.

On the Blood Corpuscles of the Ibex.

Before the author's discovery of the singularly minute size of the blood discs of the musk deer,* those of the goat were the smallest known. He now announces that the corpuscles of the ibex are slightly

* See Med. Chir. Trans., vol. xxiii.; London and Edinb. Phil. Mag., Dec. 1, 1839; Annals of Natural History of the same date; Dublin Medical Press, Nov. 27, 1839; and Valentin's Repertorium, 1840.

smaller than those of the goat, and, therefore, intermediate in size to the corpuscles of the goat and those of the musk deer. The following average dimensions of the discs were given :—

Goat (*capra hircus*, Linn.) . . . . . $\frac{1}{5166}$
Ibex (*capra caucasica ?*) . . . . . $\frac{1}{6858}$
Musk deer (*moschus javanicus*, Pallas) . $\frac{1}{12325}$

MEDICAL MEN AND ASSESSED TAXES.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—Allow me to call the attention of the profession, through the medium of your Journal, to the recent decision of the commissioners of taxes, worded as follows :—

"*Income Tax.*—That the carriage and horses of a medical man, although required for the exercise of his profession, if occasionally used by him or his family for pleasure, cannot be deducted from his profits, nor will any deduction be made for the assessed taxes on them."

Surely I cannot be singular in thinking this as a most oppressive and unjust decision against a body of men, who have, perhaps, more claims on the leniency of the commissioners than any other class subject to the tax.

I am content in merely calling your attention to the subject, trusting that its injustice will exact from your pen some suggestions for its immediate rescission.

I am, Gentlemen,
Your obedient servant,
A Country Practitioner.

UNIVERSITY OF LONDON.

BACHELOR OF MEDICINE.—FIRST EXAMINATION.—1842.
PASS EXAMINATION.

Tuesday, August 2.—*Morning*, 10 *to* 1.

CHEMISTRY.

Examiner—Professor Daniell.

1. A solution of a salt is contained in a bottle marked A, placed before you with appropriate tests; of what acid and base is it composed, what are their equivalent numbers upon the hydrogen scale, and what is the nature of the changes produced by the tests ?

2. A solution of another salt, marked B, is also placed before you with appropriate tests; what is the acid of the salt, what its probable base, its equivalent number, and the nature of the changes produced by the tests ?

3. What is meant by the atomic theory ? State its leading doctrines and explain them by examples.

4. How may the chemical equivalent of a substance be determined ?

5. What advantage is there in stating the proportions of the ingredients of compound bodies in equivalents over a statement of the same proportions per cent ?

6. What do the following symbols represent :—

SO_3, NH_3, $HO = SO_4$, NH_4 ?

and what is the theory to which the equation refers ?

7. What general principle do we avail ourselves of for the measurement of temperature, and how is it applied ?

8. Describe the construction and explain the action of the electrophorus.

9. What are the forces which may be developed by a voltaic current? Briefly exemplify each when called to action.

Afternoon, 3 *to* 6.

BOTANY.

Examiner—Professor Henslow.

1. Distinguish between prickles, thorns, and bristles.

2. Explain the structure of a cremocarpium.

3. Compare the principal structural differences in the flowers and fruit of clematis, anemone, ranunculus, helleborus, and pæonia, upon which five subordinate groups or tribes of ranunculaceæ depend.

4. What is the chief characteristic difference in the structure of the flowers of plants grouped under the tribes alsineæ and sileneæ ?

5. How are the leaves disposed in chenopodiaceæ, and have they stipules or not ?

6. How is the origin of the vesicles of the cellular tissue explained ?

7. Explain the general process of fertilisation; and describe its peculiar modifications in orchidaceæ. Describe the specimens marked 8, 9, 10.

MATERIA MEDICA AND PHARMACY.

Examiner—Dr. Pereira.

1. Describe the mode of preparing tartaric acid according to the London Pharmacopœia. Explain the chemical changes which occur in the process. State the atomic constitution of the acid in both the dry and crystallised states. Give the tests by which the acid may be distinguished from other vegetable acids, and by which the absence of the bitartrate of potash in its powder may be ascertained. Lastly, state what are the quantities of carbonate of potash (the granulated salt of the shops), bicarbonate of potash (crystallised), carbonate of soda (crystallised), sodæ sesquicarbonas, Ph. Lond., and ammoniæ sesquicarbonas, Ph. Lond., which are respectively required to saturate one scruple of the crystallised acid.

2. You are requested to give a botanical description of hyoscyamus niger; describing successively the root, stem, leaves, flowers, fruit, and seeds; stating its duration, and its position in both the sexual system of Linnæus and the natural system of De Candolle. Mention the principal symptoms which characterise its operation on the system in both medicinal and poisonous doses. State in what cases its use is preferable to that of opium, and in what doses you would administer the tincture and extract.

3. Briefly state the circumstances which favor the view that the absorption of a medicine is necessary to the production of its remote effects.

4. In what cases are ferruginous tonics to be preferred to the bitter vegetable tonics ?

5. What is the specific gravity of spiritus rectificatus, Ph. Lond., and of spiritus tenuior ? What are the relative proportions, by volume, of rectified spirit and water which are required to constitute proof spirit ? By what tests is the presence of oil of corn spirit in rectified spirit to be detected ?

6. What quantities of the following preparations contain respectively one grain of opium ? Confectio opii, pilulæ saponis compositæ, pulvis cretæ compositus cum opio, tinctura opii, tinctura camphoræ composita, and pulvis ipecacuanhæ compositus.

THE BILATERAL OPERATION FOR THE STONE.

Dr. Ribes, the principal physician of the Hotel Royal des Invalides, claims the merit of the discovery of this operation for himself and M. Chaussier, as far as its performance on the dead subject will entitle them to claim. He was led to it by accident. While prosector or demonstrator of anatomy at Chaussier's school, in the early part of the present century, he was in the habit of teaching young army surgeons the manual practice of operations, and to bring the left hand into use as well as the right—to render them, in fact, ambi-dexter—when they had operated on the left side for lithotomy with the right hand, he caused them to repeat it on the right side with the left. A body that had been thus doubly operated on was once left on the table, the feet hanging down, and the nates supported by a billet of wood; Dr. Ribes's attention was drawn to it, and more especially to the double incision, which resembled a semicircular one. His curiosity was excited to learn what parts had been divided; he made a careful dissection, and soon discovered the great advantages to be drawn from reaching the bladder by the urethra after a semicircular incision made in the perineum, a little above the anterior part of the anus. He imparted his ideas to Chaussier, who caused him to perform the operation again and again on the dead body, and to dissect the part carefully each time, from which the following directions for the proceeding were drawn:—

The patient should be placed on a table, with his head lower than his pelvis, so that the region of the perineum and anus may be presented in their full extent, and the pubes be on a nearly horizontal plan. The thighs, of course, must be separated and secured. A catheter with a double groove, one to the right, another to the left, the two meeting at the point of the greatest curve—that is, at the part corresponding to the base of the bulb and membranous portion of the urethra—is next introduced, and confided to an assistant, who at the same time raises the scrotum, and places the skin of the perineum on the stretch. The anus being depressed by three fingers of the left hand, a semicircular or crescent-shaped incision from right to left is made in the perineum, a little above the bowel, dividing the skin, part of the sphincter, and tranversus perinei. Its convexity is to be forwards, the concavity towards the anus. The next step is to pass the index finger into the wound, in order to depress the rectum, to make way by the scalpel as far as the membranous part of the urethra, to incise the canal, and to prolong the incision right and left in the body of the prostate. The operation is then to be completed in the usual way.

The advantages of the operation are stated by M. Ribes to be, opening a less oblique, more easy and straight route to the bladder, in the course of which no arterial branch is injured, by which hæmorrhage of any importance might be caused, the greater safety of the vesiculæ seminales, and a more commodious and more free aperture for the introduction of instruments, and for the extraction of the stone.

This operation has been said to be the same as that recommended by Celsus, but this is denied by Ribes, who says that, in the Celsian proceeding, the concavity of the crescent-shaped incision is the reverse of the one he recommends; and that Celsus incised the neck of the bladder, and thus withdrew the stone, thereby endangering the vesiculæ seminales and the vasa deferentia, whilst, in his operation, the membranous portion of the urethra, the prostate gland, and neck of the bladder, are divided horizontally, by which such danger is avoided.

According to some commentators on Celsus, the horns of the crescentic incision are turned towards the thigh, instead of being directed either upwards or downwards.

Dupuytren, who is the first surgeon who performed this operation on the living subject, in his account of his proceedings, gave the credit of the discovery to Messrs. Ribes and Chaussier.—*Gazette Médicale.*

MELANOSIS OF THE EYE.

Pathologists are divided in opinion with respect to the malignant character of pure melanosis, uncombined with any cancerous or fungoid degeneration. Dr. Carswell believes melanosis to be an inorganic substance, injurious only from its quantity, the number of organs it affects, its situation, and mechanical operation. He observes further, that the much greater frequency of melanosis in the grey and white, than in the bay, brown, or black horse, is a circumstance tending to support the theory which ascribes its origin to the accumulation in the blood of the carbon, which is naturally employed to color different parts of the body, as the hair, rete mucosum, choroid, and other parts. The theory is also supported by chemical analysis, and by the facts derived from the consideration of the physical and anatomical characters of the disease. Lobstein and Cruveilhier are of opinion that melanosis is not malignant; the latter calls the pigmentum nigrum, and the secretion found in the ink-bag of the cuttle-fish, instances of natural melanosis. Wardrop and Mackenzie both regard it as malignant; and Dr. Warren, in his work on tumors, says that there are two kinds, one malignant, and the other not. He has never seen an instance where the disease was malignant.

Dr. Byron, the surgeon to the County of Meath Infirmary, has published an interesting series of cases of this deposit affecting the eye, which serve to illustrate this pathological problem. He seems to incline to the opinion that pure melanosis is not necessarily a malignant disease.

Melanosis of the eye can rarely be recognised until the adventitious production, so characteristic of the disease, has forced its way through the tunics of the eye-ball. Then dark, livid tubercles show themselves on its surface at various points, soon degenerating into a black, fungous mass, which quickly ulcerates, sloughs, and bleeds, distending the lids, and forcing its way between them. The discharge is a dark-colored ichor. Portions of the diseased structure are occasionally separated, the process being accompanied by great pain in the head and constitutional irritation. Should the disease remain uncontrolled, it generally extends to the brain, and the patient dies comatose. On examination after the removal of the tumor, all

traces of its normal structure are lost in the morbid mass, and the greater part of the cut surfaces present a deep sooty color, more or less intermixed with black or brown. When fibrous or cerebriform matter is mixed up with that of melanosis, the disease is combined with fungus or carcinoma.

The first case recorded by Dr. Byron is that of a fair complexioned boy, four years old, laboring under fungus hæmatodes and melanosis of the right eye far advanced, although the disease had existed only two months. The operation of extirpation of the eye was practised, but the socket could not be entirely cleared of the diseased growth, a small portion of soft substance, inconsiderable in size, remaining at the bottom of the orbit, whence it could not be removed; it appeared to pass backwards into the cranium. As might have been expected, the disease returned before cicatrisation could take place, and the little patient died in three months. The diseased structure removed by the operation consisted of three lobules; the first and largest, nearly the size of a pigeon's egg, occupied the seat of the lacrymal gland; the second, more than half as large, lay towards the inner side of the orbit; and the third and smallest extended backwards, enveloping in its substance the optic nerve and recti muscles, no distinct traces of which could be observed. A cavity in the diseased mass, corresponding to the situation of the vitreous humor, was filled by a soft, black substance, about the consistence of thick cream, half putrid, and very fetid. The tumor, when cut into, presented an uniform, whitish, semi-cartilaginous appearance. It was firm to the touch, but not hard. This case Dr. Byron considers a good example of medullary fungus in its third stage. The coexistence of melanosis does not appear to have exercised any influence on its nature or termination.

The second case Dr. Byron calls an admirable specimen of melanosis of the punctiform, tuberiform, and stratiform kinds, combined in one mass. It occurred in the person of a young man with dark hair and complexion. The operation for staphyloma was first performed, in the hope that the eye would, after the discharge of the humors, and the unloading of the enlarged vessels, sink into the socket, and give no further trouble. This result did not take place. A month after the operation the report was, that the wound had filled up, and the eye was as large as before the operation, having an uniform fungous aspect. When he was again seen, nine months afterwards, the tumor was as large as a middle-sized orange. Its circumference at the base, including the lids, measured nine inches; in the centre, seven inches and a half, and at the top six inches. The eyelids were stretched over it, and adherent to the loose conjunctiva. Its anterior surface was irregular and nodulated, the largest and most internal of the protuberances being of a dark purple color, and bleeding when touched; the others were of a lighter tinge. The tumor was firm and elastic, but hard in places. The patient said that it sometimes discharged as much as a pint of blood at a time. General health improved.

When admitted a fortnight afterwards, the three nodules on the anterior surface were partially ulcerated, and discharged a small quantity of ichor. The tumor was then removed by the extirpation of the eye. It was found to be of great size. The natural contents of the orbit were changed into a firm fleshy mass, on the surface of which lay the muscles of the eye. On stripping off the stretched and altered sclerotic coat, the surface of the tumor was found to be very irregular, by numerous tubercles of various sizes, from the dimensions of a pea to that of a chesnut, between which was a white semi-cartilaginous substance. The larger projections, on being divided, exuded a matter similar to the pigmentum nigrum of the choroid coat, and were composed of a more dense structure of the same nature. The centre of the tumor was occupied by a similar substance. The smaller tubercles presented the same appearance, but lighter in color. The optic nerve was sound. This patient recovered without a bad symptom, and was discharged cured at the end of three months, and continued so. He died of a fever four years afterwards. The appearances after death are not recorded.

The third and fourth cases are examples of melanosis combined with scirrhus or cancer. In the first of these two cases the disease commenced by a fleshy, wart-like, red tumor on the conjunctiva, which increased in size, involving the globe, and destroying vision. It was attended with pain at first of a tingling, burning kind, but afterwards sharp and lancinating. The growth of the tumor was rapid. When admitted, the cornea was opaque, and half covered with indurated tubercles; the upper eyelid was tumid, and felt soft and puffy to the touch; the conjunctiva of the eye and lid was much chemosed. The disease was extirpated ten days after admission.

On cutting into the tumor in the upper eyelid, about half an ounce of perfectly black fluid flowed out, and the entire of the back part of the orbit was found occupied by the same kind of matter. The optic nerve appeared to float in this melanotic fluid. It was lessened in size, and corroded in two places. The entire of the sclerotic coat was filled with black fluid. The scirrhous indurations of the globe did not extend so far back as the optic nerve. The lacrymal gland was partially indurated.

The poor patient recovered from the immediate effects of the operation, but the cancer returned, and she died three months afterwards.

The fourth case is a well-marked one of cancer of the eye, combined with the presence of a melanotic fluid in the cavity in which the vitreous humor is contained. The patient was a worn out, exhausted old man, sixty-five years of age. He recovered from the operation, but was observed neither to regain flesh nor strength. He died in about two months, apparently from exhaustion, and without pain.

On examination of the body, there were five circumscribed black tumors on the integuments of the chest and abdomen, and the lungs and liver were also studded with them. One in the liver, near the great fissure, was as large as a turkey's egg, and projected above the level of the liver, about one-third of its entire bulk. Tubercles were found in the left lung, and several vomicæ in the upper part of the right. The brain was free from any melanotic deposit.

No other organ appeared to be diseased; but on removing the liver, a large tumor was discovered to have descended between the crura of the diaphragm, on opening which a great quantity of thin pus was scharged, and it was discovered to have originated

from a disease of two of the dorsal vertebræ, the fifth and sixth.

With respect to the operation for the extirpation of the eye, Dr. Byron says that a simple scalpel is all that is required for its performance, the fingers and thumb of the left hand of the operator serving in place of forceps; but a knife with a lateral curve is required for the division of the optic nerve, where the disease has acquired considerable bulk. In all deep wounds in the neighbourhood of important organs, or of extensive mucous or serous surfaces, the speedy removal of charpie or lint, when it has been used to restrain bleeding, is very necessary, to avoid exciting the consequent inflammation beyond proper bounds.—*Dublin Medical Journal*, July, 1842.

GEOLOGICAL CAUSES OF HILL FEVER IN INDIA.

Dr. Heyne, of Madras, has published an important communication on the hill fevers, the principal cause of which he considers to be the geological composition of the hill where the fever occurs. It exists, he says, constantly and invariably among certain descriptions of hills, when others, of a different composition, are as constantly free from it. The hills where it is found to prevail are the granite rock, but contain in addition, quartz, feltspar, and mica, besides a great proportion of ferruginous hornblende, which, by its disintegration or separation from the rock, becomes highly magnetic; to this Dr. Heyne refers the cause of the fever. This granite is remarkable for its disintegration, as it not only separates during the hot season in large masses of many tons, but crumbles as easily into its component particles, and is found as sand in great abundance, not only near every rock, but near every stone, whence it is carried by the torrents, during the rains, to the lower parts of the country, and thus forms the particular mark by which these hills may be distinguished from all others. It is the source whence all the iron in that part of India is obtained. It is generally not attracted by the magnet when united to the mass, even when it occurs, as in hornblende slate or greenstone, in the greatest abundance, but it is after it has been separated, as much as iron filings, owing probably to incipient oxydation or the development of magnetism by the high temperature, which has caused the disintegration of the rock.

The hills, where the fever is unknown, consist of primitive trap—viz., quartz, feltspar, and real hornblende, with little or no admixture of iron-stone. In fact, wherever the iron granite or magnetic iron-stone rocks occur, there will be the fever, while the hills, whose strata are free from ferruginous compounds, are equally free from the destructive typhus fever alluded to by Dr. Heyne.

Dr. Heyne says, "A most remarkable instance illustrative of these facts, and of my deductions from them, I found at Tripatoor, which lies in a valley, close to a large table-land, the rock of which is sand-stone. I asked there a respectable native whether any such disorder as fevers were frequent in the country, but received in answer, 'No, thank God, not within ten miles of this place; at Javadymalle, a hill fort, where no man can live two days without getting it.' To this place a person was despatched with the simple order to bring two or three stones from the rock of the hill, and some sand from the road. The man returned, and brought pieces of a rock composed of red feltspar, quartz, and plenty of ferruginous hornblende; and the sand of the road consisted entirely of magnetic sand and particles of feltspar." In the Pulicat hills, which consist entirely of flinty slate, the hill fever is totally unknown, as are also those of the Cuddapah district, which are composed of the clay-slate formation; some are calcareous. At Kishna, near Chintupilly, a place at all times dreaded for its fevers, the iron granite hills prevail again. Dr. Heyne states it as his belief, that his observation that the hill fever on this coast exists exclusively among the hills of the granite formation, or where iron-stone is found in large quantities, will be confirmed the more it is brought to the test.

Hills of this description are easily recognised at a distance by their very rugged and abruptly pointed appearance and the great steepness at their tops. The ranges of this formation are also very interrupted, and generally consist of rows of single hills, although to the southward they have been found connected also at their bases, and in triple and quadruple ranges.

The cause of the fevers apparently existing in the iron-stone range of hills, is attributed by Dr. Heyne to the magnetic or electric fluid which seems to exist in the greatest abundance in the iron hornblende, and is disengaged in great quantity in the hot season. This, he says, must be, on common physical principles, the case, when the temperature is more than usually increased, as it is known that a high degree of electricity can be raised in certain minerals by merely beating them. The hottest season, therefore, when the rocks exposed to the meridian rays of the sun are raised to the accumulated heat of 220°, is the epoch when the fever rages most, which is supposed to originate from the greater development of magnetism. It stands also to reason that the first rain, which cools the atmosphere down to 74°, must put a stop to the discharge of the magnetic or electric principle, and to the further progress of the fever. Epidemic fevers, in Madras, are preceded by electrical phenomena; and Dr. Heyne expresses his opinion that all fevers are in some degree engendered by a superabundance of electricity, either from the local situation, or the habitude of the individual.—*Madras Medical Journal.*

ASSAFŒTIDA IN HOOPING-COUGH.

Dr. Rieken has derived more advantage from the use of assafœtida than from any other remedy in three epidemics of hooping-cough. It is indicated only after the febrile period has passed, and its influence is diminished in the third stage, when tonics should be combined with it. As assafœtida is a medicine which it would be very difficult to induce children to take by the mouth, Dr. Rieken prescribes it in enemas—he orders three grains of the gum resin to be rubbed up with a sufficient quantity of yolk of egg, and mixed with 125 to 250 scruples of water. This mixture will suffice for ten or twelve lavements for children under a year old; for from four to six, for children three years old; and for two or three only, for those that are older. For the first five or six days, two enemata are given daily, sometimes more; after that, one at night will be sufficient. If diarrhœa should come on, it may be stopped by increasing the quantity of the yolk, and by adding starch or gum arabic; olive oil should be added if tenesmus should supervene. The use of the assafœtida is very well borne by children of a strong

constitution, and still better by those that are nervous or lymphatic.—*Annales de la Soc. Med. de Bruxelles.*

HYDATIDS OF THE LIVER.

A young man, a house-painter, twenty-five years of age, of a weakly, strumous constitution, was admitted into la Charité, under the care of Cruveilhier, for a tumor in the region of the right hypochondrium, which gave a sense of fluctuation on pressure, but not a rushing sound (bruissement). It was unattended with icterus. The patient's general health was bad; his strength was exhausted, and he was troubled with dyspnœa; Cruveilhier diagnosticated the presence of hydatids. A few days after his admission, the Vienna paste was applied twice; but the cyst not having been opened either time on the separation of the slough, a trocar was plunged in, and about three quarts of clear, limpid, straw-colored serum, without hydatids, were evacuated. The patient was much relieved by the operation, and soon afterwards left the hospital; he returned in five weeks' time, the tumor having filled again, attended with febrile symptoms, and increased dyspnœa. The use of the trocar on this occasion was followed by the discharge of a quart of healthy pus, which, however, in the course of a few days, changed its character, becoming fetid and unhealthy, and mixed with the remains of hydatid cysts and gelatinous deposits. The patient gradually sunk exhausted by diarrhœa and the discharge from the tumor.

On examination of the body, a small quantity of serum was found in the abdomen. The left lobe of the liver was healthy; the right was enormously enlarged; on opening the tumor posteriorly, a discharge of pus, together with the remains of the cysts, followed; a second and smaller cyst was then discovered behind and above the first, not communicating with it, and filled, as it had been, with hydatid membranes; the larger of these could contain the head of an adult, the smaller that of a fœtus; the smaller cavity contained an hydatid, about the size of a nut, and perfectly intact. The lungs were emphysematous; the other organs healthy.

Cruveilhier is of opinion that the cavity first opened contained hydatids in a state of integrity, and serum, and that they were not discharged when the trocar was first used, because they were perfect in size and shape, and could not pass through the aperture; but when the place of the serum was supplied by pus, the hydatids lost their vitality, were broken up, and readily expelled.—*Gazette des Hopitaux*, June, 1842.

QUININE FOUND IN THE URINE AND IN THE BLOOD.

M. Landerer, on examining the sediment from the urine of a patient, to whom the sulphate of quina had been given for intermittent neuralgic pains, found, besides the phosphate and urate of lime and carbonate of ammonia, traces of free quina; the urine contained quina in addition to the carbonate, sulphate, and hydrochlorate of ammonia.

The blood of a patient who had been taking quina for remittent fever, and which was drawn on account of the supervention of pleurisy, had but a slightly bitter taste when first drawn, and while still warm; the bitterness was much more marked when it had become cold and coagulated. There was a great difference in the taste of the serum and of the coagulum; the latter was scarcely bitter, while the former was very much so. The serum consequently yielded quina, after having been evaporated, the residue digested with acidulated water, filtered, and precipitated by ammonia. The fæces also contained quina. The serum of the blood of another patient also yielded quina on analysis, presenting results exactly similar to those afforded by the first patient.—*Repertorium für Pharmacie.*

DISTINCTION BETWEEN ARSENICAL AND ANTIMONIAL SPOTS.

In a recent Retrospect, the distinctive action of the chloruret of soda upon arsenical and antimonial spots was described, the spots resulting from arsenic being dissolved, while those from antimony remain intact. The 6th volume of the Memoirs of the Literary and Philosophical Society of Manchester contains a paper by Mr. Watson on the detection of arsenic by Marsh's apparatus, in which he describes another mode of distinguishing between them by the application of heat. Considering the readiness with which metallic arsenic volatilises, and that it is said to be fusible at or below 400° of F., while antimony requires about 800° for fusion, he thought it probable that there might be a wide thermometric range between the points at which the two metals were volatile and evaporable; accordingly having obtained crusts of metallic arsenic and of antimony on slips of glass, and enclosed these in test tubes, which were then hermetically sealed by means of a blow-pipe, he immersed them to a little more than the depth of the coated part of the slips (half the length of the tubes) in a bulb containing rape oil in a state of ebullition. In one minute the arsenic had entirely disappeared from that part of the slip surrounded by the hot oil; but the antimony did not entirely disappear before the expiration of seven minutes. In this case the arsenical crust was very thick, the antimonial one very thin. A fresh set of experiments were afterwards made, when the temperature of the oil ranged at from 490° to 500°; in some instances thick crusts of arsenic were entirely volatilised in about fourteen minutes, and in others crusts, less thick, disappeared in eight, the length of time required for the entire volatilisation depending upon the thickness of the crust; very thin films of antimony stood the temperature for an hour, without perceptible volatilisation taking place. Similar experiments were next conducted at a temperature ranging from 355° to 365°, when very thick arsenical crusts were volatilised in three or four hours, thin ones disappearing in half an hour or less; while those of antimony, apparently of the same density, did not perceptibly diminish in twenty hours, nor was it likely they should, as the temperature used is lower than that at which antimony begins to volatilize.

The objections to this process are, the tediousness of the operation, and the constant watching of the temperature requisite for success.

ICTERUS.

Dr. Boyd's pathological contributions contain an account of the necrological appearances occurring in two cases of female infants laboring under jaundice. In one, a female three weeks old, which was merely brought into the institution for interment, and of which no history could be obtained, the liver was dark-colored, the gall-bladder rather flaccid; it contained a little glairy mucus in its fundus, in its upper portion,

and cystic duct; there was a considerable quantity of dark-colored matter of the consistence of soft wax filling it, and completely blocking up the duct, sufficient to form a complete mechanical obstruction to the flow of the bile. In the other case, a female, eight days old, the liver was dark-colored, and rather congested; the gall-bladder filled with limpid mucus; no bilious matter in the intestines; no obstructions were detected in the bile ducts. The whole body was of a bright yellow color, and the internal membranes were tinged of the same color.—*Edinburgh Medical and Surgical Journal*, July, 1842.

COMPOSITION OF MUCUS.

At the suggestion and under the direction of Professor Liebig, Dr. Kemp performed a series of analyses in the laboratory of Giessen, with the view of ascertaining the elementary composition of mucus. The secretion operated on was obtained from the gall-bladder of the ox, and after having been separated by a chemical process from all extraneous matters, was dried at the temperature of 100° Celsius. When moist, the mucus thus obtained may be described as a greyish, gelatinous, opaque mass, not soluble in water, but becoming transparent in that menstruum. When dried at 100° Celsius, the color changes to a dark olive. From the result of his experiments, Dr. Kemp considers the following to be the quantity of the different elements per cent.:—Carbon, 52.84; hydrogen, 7.09; nitrogen, 15.40; oxygen and sulphur, 24.67. Or in atoms, carbon, 48; hydrogen, 39; nitrogen, 6; oxygen, 17. If we now compare the analysis of protein, which is—carbon 48, hydrogen 36, nitrogen 6, oxygen 14, we shall find that the composition of mucus is equivalent to that of protein plus three atoms of water. The middle coat of arteries Scherer found to be composed of carbon, 48; hydrogen, 38; nitrogen, 6; and oxygen, 16; or protein with two atoms of water.—*Medical Gazette*, July 29, 1842.

PRIVATE SCHOOLS.

We have been requested to state that the Charlotte-street School of Medicine, Bloomsbury, will reopen as usual on the 1st of October next. We were not aware that the establishment conducted by Mr. Dermott was a school of medicine.

COMMISSIONERS IN LUNACY.

The Lord Chancellor has, under the authority of the acts 2nd and 3rd William IV., c. 107, and 5th and 6th Victoria, c. 87, appointed Lord Seymour, Lord Ashley, Robert Gordon, Esq., the Right Hon. Robert Vernon Smith, Colonel William Henry Sykes, James Milnes Gaskell, Esq., John Barneby, Esq., Francis Barlow, Esq., J. R. Gowen, Esq., J. W. Mylne, Esq., Bryan Waller Procter, Esq., J. Hancock Hall, Esq., R. Wilfred Skeffington Lutwidge, Esq., Dr. Thomas Turner, Dr. John Bright, Dr. Henry Herbert Southey, Dr. John Robert Hume, Dr. Thomas Waterfield, Dr. Francis Bisset Hawkins, and Dr. James Cowles Prichard, to be the metropolitan commissioners in lunacy for the space of one year, for licensing and visiting all houses within the jurisdiction of the said commissioners, and for carrying into effect the several provisions of the said acts.

OBITUARY.

At Egham Hythe, Surrey, aged eighty-three, Wm. Tothill, surgeon., a member of the Society of Friends.

At Yarmouth, Isle of Wight, on the 30th ult., Mr. C. A. Crosswell, surgeon, of North Brixton, Surrey, aged thirty-three.

PROMOTIONS AND APPOINTMENTS.

MILITARY.

49th Foot—Staff-surgeon of the second class, William Michael Ford, to be surgeon, vice French, promoted on the staff.

53rd Foot—Assistant-surgeon Thomas Galbraith Logan, M.D., to be surgeon, vice Maclean, promoted on the staff.

Hospital Staff—Staff-surgeon John Marshall, to be staff-surgeon of the second class, vice Ford, appointed to the 49th foot.

NAVAL.

Surgeon—A. Stewart, to the Orestes.

Assistant-surgeon—C. Coffey, to the Caledonia.

Dr. M'Arthur, surgeon of the Howe, having obtained six months' leave, owing to ill health, his duties will be performed by Mr. Elliott, surgeon of the Devastation; senior Assistant-surgeon Campbell, of the Queen, to be acting surgeon of the Devastation; and Assistant-surgeon Gruggen, of the Impregnable, to be assistant-surgeon of the Devastation.

ROYAL COLLEGE OF SURGEONS IN LONDON.

Members admitted Friday, August 26, 1842.

J. Wickham, R. Morrah, J. P. Dickson, W. H. Addison, G. Birkett, H. Morgan, W. A. Leslie, W. B. Keech, G. Henderson.

Monday, August 29, 1842.

R. P. Chapman, J. D. Allen.

APOTHECARIES' HALL.

Licentiates admitted Thursday, August 25, 1842.

T. Loy, Stokesley; F. Boase, Penzance; C. R. Jones G. H. Mantell, Farringdon; J. Miller.

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ON

POISONING BY THE FIXED ALKALIES.

By M. Orfila.

(*Continued from page* 263.)

CONCLUSIONS.

First, If a liquid that has been vomited, or found in the digestive canal, is alkaline before and after it has been subjected to prolonged ebullition, and that being evaporated to dryness and treated with boiling alcohol of 41°, as has been already said, it leaves in the silver crucible in which the operation has been carried on, a matter soluble in water, which restores the blue color of reddened turmeric paper, and which having been filtered, is not rendered turbid by carbonic acid gas, and gives a precipitate like potass with the chloruret of platina and the perchloric acid, if we cannot affirm that ingestion of potassa purified by alcohol, potassa cum calce, or of carbonate of potass has taken place into the stomach of the individual suspected to have been poisoned, we may at least show that there are great probabilities in favor of the fact. Reserve is requisite in such a case, because it is not impossible, although very unlikely, that the person in question may have taken a large quantity of certain kinds of food naturally containing a greater amount of the salts of potass soluble in alcohol, than those I experimented on, and that the potass obtained by these experiments was derived from these salts.

On the other hand we might state decidedly that ingestion of potass, purified by alcohol, potassa cum calce, or of carbonate of potass had taken place, and consequently poisoning, if after having found a free alkali or its carbonate by the processes just indicated, we were to learn that the individual had suffered a little while after eating or drinking, from vomiting of sanguinolent or black matters, which did not effervesce, and which restored the blue color of reddened litmus paper, from severe pain in the abdomen, purging, and from other symptoms similar to those caused by caustic poisons.

The conclusion in favor of poisoning may also be drawn in those cases where the presence of the alkali has been ascertained, as has been already said, but several of the symptoms which would be expected are absent, yet on examination of the body, the tissues of the alimentary canal, and of the stomach in particular, are found to be softened, inflamed, ecchymosed, ulcerated, sloughing, or even perforated in several places.

Secondly, If a solid that has been vomited, or is found in the alimentary canal, restores the blue color of reddened paper, preserves its alkalinescence after having been boiled in concentrated alcohol, and its alcoholic solution treated in accordance with the analytical process already described, behaves itself like potass with carbonic acid, the chloruret of platina, and the perchloric acid, then the same conclusions may be drawn as from the liquid previously spoken of.

It would be difficult, not to say impossible, to declare precisely in many cases, whether the alkali which had been taken, and afterwards dissolved in alcohol, was pure and caustic, or a carbonate, because the carbonate of potass, which is insoluble in alcohol when it is not mixed with organic matters, can be dissolved in this menstruum with the assistance of certain alimentary fluids with which it may be mixed (*vide* 12th Experiment); and that if, in order to resolve the problem, recourse is had to an acid to ascertain whether there would be effervescence, still error might arise; in fact caustic potass passes readily to the state of carbonate, when it is treated with organic matters, so that effervescence might take place, even if the potass had been administered in the caustic state; and on the other hand, the want of effervescence would not prove that the alkali had been taken in the caustic state, because it often happens that in the midst of these organic matters, a very small quantity of carbonate of potass may be decomposed by acids, and the slight effervescence that would result not be detected. It matters little, after all, that in many cases of this kind we are not able to solve this problem, the real essential point is to ascertain that potass exists in the suspected matters in one of the three forms already spoken of.

Thirdly, If the experiments made upon the liquid or solid matters that have been vomited, or are found in the digestive apparatus, should be without result, and potass should be obtained by acting on the liver, spleen, and kidneys, by boiling water, alcohol, &c. (*vide* 10th Experiment), we might then assert that this alkali had been introduced into the animal economy by means of absorption. Such results, together with those furnished by the symptoms and lesions of structure, would authorise the expert to declare that poisoning by potass had taken place. At the same time, it must not be asserted that a person has not been poisoned by potass or its carbonate, because it is impossible, by following the process indicated, to obtain either caustic potass or its carbonate from the matters vomited, or those found in the digestive apparatus; it may be that a dose of potass, capable of producing serious symptoms, may be introduced into a stomach containing a considerable proportion of acid, or a notable quantity of acid articles of food, that it may have caused an energetic irritant action, and have been ultimately changed into one or more salts, insoluble in alcohol. In such a case, the nature and progress of the disease, the anatomical lesions, &c., must be the guide, and from them, perhaps, we may obtain presumptive or probable evidence of poisoning.

I shall not terminate this paper without throwing a *coup d'œil* on the observations made some time since by Bretonneau, concerning the action of potass on the animal economy.

"In the dose of two scruples or more," says this physician, "this alkali, introduced into the stomach of dogs, has constantly caused vomiting, marasmus, and death. Extensive ulceration of the œsophagus, and the destruction of the epidermoid tunic, having appeared to be the principal cause of the vomiting, the alkali was applied to the stomach near its pyloric orifice, by means of a porte-caustique, so that its action was confined to the parietes of that viscus. In this way two or three scruples could be passed in successively, at longer or shorter intervals, without causing death. A more or less serious idiopathic affection of the stomach was induced, attended with vomiting of a frothy, mucous, soapy, yellow, bloody character, and sometimes of pure blood. But after two days' rest, during which the animal showed little desire for food, without there being developed any sympathetic disturbance of the functions of animal or organic life, it was apparently restored to its usual state. The lesions discovered many weeks afterwards in the stomach of those of the animals which were killed by strangulation, would not have been suspected on seeing their voracity, petulance, and gaiety. In many of them the mucous membrane was found to have been destroyed in nearly its whole extent. In some parts the muscular and peritoneal coats were also affected, and formed thick, rough, deep cicatrices, which were very apparent even on the external surface of the stomach."

The results of my experience are as follows:—I have upon two occasions introduced into the stomachs of two robust dogs, of middle size, two scruples and a half of solid potassa cum calce, cut into twelve little bits. The animals were fasting, and each piece of alkali reached the stomach without having touched the œsophagus, because it was pushed by a metallic stem through a large elastic catheter, which was passed down to the pylorus, and I ascertained, at the end of the experiment, that the catheter had not been pierced. In a third experiment I injected the same quantity of potassa cum calce, dissolved in eighty scruples of water, into the stomach of another dog, also fasting. I used a syringe and large catheter for this purpose, in order that the alkali should not come in contact with the œsophagus. These animals vomited frequently, especially during the first hour after the poisoning, frothy, bloody matters, and even blood containing much potass; they experienced all the symptoms usually caused by this alkali, and died, one at the end of twenty, another thirty, and the last forty-six hours after the ingestion of the poison. The stomachs were very much inflamed, ecchymosed, ulcerated, and sloughing in places; the mucous membrane was destroyed in parts, but there were not any signs of perforation. The two upper thirds of the œsophagus were totally unaffected, whilst the lower third was in nearly the same state as the stomach.

The difference between the results of my experiments and those of M. Bretonneau arises from the fact that he did not introduce all the caustic at once, but injected it in different proportions at longer or shorter intervals; if, therefore, each time the animals have thrown up a notable quantity of the poison, as it appears from the statements of M. Bretonneau, we can easily understand the cause of the poison not proving fatal. Notwithstanding all this, the facts narrated by the learned physician of Tours are very important, inasmuch as they prove that these animals can live and eat voraciously while the stomach is the seat of such very serious mischief.

SODA.

Soda purified by Alcohol.—The physical properties of soda purified by alcohol, its action upon blue colors, on carbonic acid, and on the nitrate of silver, are the same as those of potass purified by alcohol. The chloruret of platina only renders the solutions of soda turbid, when they are very concentrated; then a canary yellow precipitate is formed, less granular and less adherent to the glass than that yielded by potass; the perchloric acid does not cause the formation of any deposit, whilst a gelatinous and transparent precipitate is obtained with the siliceous phtorhydric acid.

A weak, aqueous solution of pure soda restores the blue color of litmus paper reddened by an acid, and is not precipitated either by the carbonic, perchloric, or siliceous phtorhydric acid, nor by the chloruret of platina. The nitrate of silver acts upon it as on a solution of potass in water, unless the solution is too weak. In that case, the liquid should be evaporated until it is sufficiently concentrated to afford, with the re-agents spoken of in the preceding paragraph, the precipitates which indicate a concentrated solution of soda.

Soda cum Calce, and Carbonate of Soda.—In these two states soda will be distinguished from that purified by alcohol, by adopting the process already described for recognising potass purified by alcohol, potassa cum calce, and the carbonate.

Mixture of Pure Soda and Aliment, and with the matters ejected by vomiting, or remaining in the digestive apparatus, the soda having attacked the tissues of the canal.—The action of this alkali on eau sucrée, tea, coffee, albumen, gelatine, bouillon, bile, blood, and the organic tissues, being the same as that of potass, the same steps in analysis should be followed as for that alkali.

Conclusions.—The conclusions to be drawn from the experiments that have been instituted relative to poisoning by soda, do not differ from those respecting poisoning by potass. At the same time, it must be borne in mind that the alcoholic solution of many articles of food in a normal state, evaporated to dryness, incinerated according to the directions in the 5th Experiment, yields, when treated with water, an alkaline ash containing carbonate of soda; it is, therefore, possible to be deceived, and to look upon this carbonate as a proof of the presence of a certain quantity of soda or its carbonate taken as a poison, when it ought to be regarded as soda existing naturally in the food. I will here give the result of experiments made in order to solve this important question. 1st, The matters obtained from the digestive canal of an animal poisoned by soda, as well as those that have been vomited, if they still contain any traces of the alkali, when they have been dried at a gentle heat, and afterwards dissolved in boiling concentrated alcohol, powerfully restore the blue color

of litmus paper, previously reddened by an acid; the alimentary substances, of which mention has been made, treated in the same manner, do not yield an alkaline solution. 2ndly, The ash obtained by decomposing at a red heat in a silver crucible, the alcoholic solution of soda resulting from poisoning, being treated with boiling water, will furnish a solution which will powerfully restore the blue color of reddened paper, and which, having been evaporated, will give a gelatinous, transparent precipitate, with siliceous phtorhydric acid; and if it is very concentrated, a slightly granular canary yellow precipitate, with the chloruret of platina; the perchloric acid will not render it turbid. The ash resulting from a mixture of two or three quarts of animal liquids (wine, bouillon, coffee, bile), treated in the same manner, has never given me an aqueous solution capable of precipitation by the phtorhydric acid and the chloruret of platina, although it restored the blue color of reddened test paper. If I could affirm that it would never be otherwise—that is to say, that in no case would the ash obtained from a normal mixture of food yield an aqueous solution, precipitable by the siliceous phtorhydric acid and the chloruret of platina—I would not hesitate to conclude, after having obtained these precipitates with an ash resulting from an *alkaline* alcoholic solution, that soda had been taken as a poison; but such a proceeding would be rash in the extreme, because it is not impossible that certain aliments, taken in great quantity, and treated as I have advised, might yield an ash which, dissolved in water, would give, with the before-named re-agents, precipitates analogous to those which would result from a small quantity of soda taken in its free state. In such a case we must be very circumspect, and, in ascertaining that the alkali found is soda, not give an opinion on its origin but with great reserve, unless the symptoms experienced by the patient and the anatomical lesions should aid in removing the difficulty. I should attach little importance to the *quantity of the precipitates* obtained by the siliceous phtorhydric acid and the chloruret of platina in a case of poisoning, unless they were so abundant as to render it impossible to attribute them to the presence of soda obtained from the food; in any other case it would be difficult, if not impossible, to judge from the quantity of the precipitate, whether the soda was taken as poison or with the food.

BARYTES AND ITS CARBONATE: THE CHLORURET OF BARIUM.

Pure Barytes.—It is solid, grey or white, according to whether it is anhydrous or hydrated, and soluble in water. The concentrated aqueous solution restores the blue color of reddened paper, and gives a white precipitate with carbonic, sulphuric, and the siliceous phtorhydric acids. The carbonate of barytes, if it is not too coherent, is dissolved in an excess of carbonic acid; the sulphate is insoluble in water and in nitric acid, and the phtorosilicate is gelatinous. The very diluted solution of barytes also restores the blue color of reddened paper, and is precipitated by carbonic and sulphuric acids, by which it is distinguished from the very dilute solution of strontian, which is not precipitated by sulphuric acid.

Barytes mixed with Food, with Vomited Matters, and with those contained in the Digestive Canal.—If the proportion of barytes contained in these matters is small, it will not be found in the solution, because it will have been changed into an insoluble carbonate, phosphate, or sulphate, by the soluble carbonates, phosphates, or sulphates contained in the organic matters; in that case the liquid will not restore the blue color of test paper previously reddened by an acid. If the dose of barytes, on the contrary, exceeds three or four grains, the liquid will in general render the reddened paper blue. Let us allow that such is the case. After having ascertained the alkaline condition of this liquid, it must be evaporated to dryness in a porcelain capsule at a gentle heat, the mass treated with pure nitric acid, diluted with five or six times its weight of boiling distilled water; the liquid is next to be filtered after a few minutes boiling, and then evaporated in a porcelain capsule, until it is carbonised, and no longer gives out any smoke; the carbon is to be detached with the blade of a clean knife, and incinerated in a platina crucible; the ash will contain caustic barytes or its carbonate, and a little of the binoxide of barium, according to the proportion of nitric acid and of organic matter contained in the carbon; it will happen most frequently that the greater part, if not all the barytes, is in the caustic state; the ash is to be boiled in distilled water and filtered, and the solution will give all the characteristics of the water of barytes. Fearing lest a portion of the barytes has been changed into carbonate during incineration, the ash exhausted by the boiling water must be treated by dilute nitric acid; the filtered liquid evaporated to dryness and calcined in a platina crucible, will yield caustic barytes, and a little of the binoxide of barium.

The next thing to be sought for is the portion of barytes, decomposed by the soluble carbonates and sulphates, contained in the organic matters. With that view, the solid matter remaining after the first treatment by diluted nitric acid, is to be dried in a porcelain capsule, then incinerated in a platina crucible, maintained at a red heat; two hours are sufficient for the decomposition of the carbonate of barytes, and for the change of the sulphate into the sulphuret of barium. The ash is to be treated with pure diluted nitric acid, which will disengage sulphuretted hydrogen, precipitate sulphur, and give a soluble nitrate of barytes; to obtain the latter, the liquid must be filtered, and evaporated in a small porcelain capsule; the solid nitrate of barytes, calcined in a platina crucible, will leave caustic barytes mixed with a little binoxide of barium.

If the organic mixture in question does not contain free barytes, and consequently does not restore the blue color of reddened paper, instead of treating it at first with dilute nitric acid, after having dried it, it should be carbonised in a porcelain capsule, then incinerated as has been already directed, to decompose the carbonate and sulphate which have been formed.

If it is requisite to discover the barytes which may be found in the tissues of the digestive canal, or in the other viscera, from absorption or combination, these organs cut into small pieces must be boiled in distilled water for an hour, and the filtered solution treated as has been already directed, when speaking of barytes mixed with food, &c. If the aqueous solution does not yield any barytes, it must be sought for in the

tissues, which have already undergone the action of boiling water by carbonising them with concentrated and pure nitric acid, then by keeping the ash in a platina crucible at a red heat, in order to decompose the carbonate and sulphate of barytes contained in these viscera, as a consequence of the change of a soluble compound of barytes into the carbonate or sulphate.

Carbonate of Barytes.—This salt is solid, white, insipid, insoluble in water, and soluble with effervescence in dilute nitric acid; sulphuric and siliceous phtorhydric acids act upon the nitrate as upon barytes. By evaporating this nitrate to dryness, and calcining the product in a platina crucible, barytes mixed with a little binoxide of barium is obtained.

If the carbonate of barytes is mixed with organic matters, we must begin by examining whether the liquid portion of these matters contains a soluble salt of barytes. It is possible that a portion, and even the whole of this carbonate has been changed in the digestive canal into the acetate or the chloruret of barium, by means of the acetic and hydrochloric acids contained in the stomach. To discover this we must act as already directed, when speaking of barytes mixed with food. If this change has not taken place, the organic matters must be dried in a porcelain capsule, and the product treated with diluted nitric acid, according to the directions previously given. Caustic barytes mixed with a little binoxide of barium will be finally obtained.

With the carbonate as with the barytes, the operations should be pushed far enough to discover the portion of barytes which may have been absorbed or passed into the state of sulphate, and be found in the solid mass, or in the organs already treated with dilute nitric acid; all that is requisite is to carbonise the remaining solids by nitric acid, then to calcine the ash for two hours at least, at an intense red heat, in order to obtain the sulphuret of barium or the carbonate of barytes, which is to be decomposed by dilute nitric acid; the liquid filtered, evaporated, and calcined, will leave caustic barytes, mixed with a little binoxide of barium.

Chloruret of Barium.—This is solid, white, pulverulent, or crystallised in square plates, possessing a very sharp acrid savour, without action on test-paper, soluble in water, and insoluble in strong alcohol.

Concentrated or Dilute Aqueous Solution.—It yields with the soluble carbonates a white precipitate of carbonate of barytes soluble in nitric acid; this precipitate, treated with carbon in a platina crucible, leaves caustic barytes mixed with a little binoxide of barium; the soluble sulphates will precipitate a white sulphate of barytes insoluble in water and in pure nitric acid; this sulphate calcined with carbon will give the sulphuret of barium; the nitrate of silver will give a precipitate of the chloruret of silver, insoluble in water and in cold or boiling nitric acid, and soluble in ammonia.

Chloruret of Barium mixed with Organic Liquids, with Vomited Matters, and with that found in the Digestive Canal.—Eau sucrée, tea, albumen, gelatine, and milk, are not rendered turbid by this salt. Bouillon and wine give precipitates only from the salts they contain, and which form insoluble salts with the chloruret of barium, such as the sulphate, tartrate, phosphate, &c. The organic mixture is to be evaporated to dryness in a porcelain capsule, and the product treated with boiling distilled water, in order to dissolve out the chloruret of barium it may contain; the filtered solution is to be dried in a porcelain capsule until it is carbonised and no longer gives out any smoke; the carbon is then to be incinerated in a platina crucible, and the ash boiled in dilute nitric acid; the nitrate dissolved, filtered, evaporated to dryness, and decomposed by fire in a platina crucible, leaves barytes. If, instead of subjecting the ash to the action of nitric acid, it were treated with water, there would not be an atom of barytes obtained in general, because during incineration the chloruret of barium is changed into the carbonate of barytes from the action of the carbonates of potass and soda contained therein on the chloruret.

The solid matter not dissolved by the water is dried in a porcelain capsule until it is carbonised; the arbon is then incinerated in a platina crucible, to change the sulphate of barytes it may contain into the sulphuret of barium. It is important to know that the chloruret of barium, unless it exists in rather a large quantity in these matters, passes constantly and almost entirely into the state of insoluble carbonate or sulphate of barytes, so that the aqueous treatment of suspected matters evaporated to dryness will scarcely yield any. It must be sought for, therefore, in the part insoluble in water; I have often mixed two or three grains of the chloruret of barium with two or three hundred scruples of a mixture of bouillon, milk, and coffee, without being able to discover an atom in the aqueous treatment, whilst I easily obtained a notable proportion of barytes by incinerating the mass which the water had not dissolved.

When it is requisite to discover in the viscera, or in the tissues of the digestive canal, the chloruret of barium which may have been absorbed, or perhaps combined with the parietes of the stomach or intestines, these organs are to be boiled for an hour in distilled water in a porcelain capsule, and the liquid and remaining solid matter are to be treated as directed, when speaking of barytes absorbed and contained in the viscera. In this way I have discovered barytes in the liver, spleen, and kidneys of a dog I had poisoned with six scruples of the chloruret of barium dissolved in 180 scruples of distilled water; the animal lived three hours and a half, and was opened immediately after death. The aqueous decoction of these organs did not yield any barytes; but the solid matter exhausted by water, carbonised by nitric acid, then heated for two hours in a platina crucible, has yielded the sulphuret of barium, which I decomposed by hydrochloric acid; on filtering, I found that the liquid contained chloruret of barium.

LIME.

Lime is solid, white, or greyish white, possesses a caustic savour, and is slightly soluble in water.

Concentrated or Dilute Aqueous Solution.—It restores the blue color of reddened paper, and gives a white precipitate with carbonic and oxalic acids; the carbonate is easily dissolved in an excess of carbonic acid, whilst the oxalate is insoluble in an excess of oxalic acid, but soluble in nitric acid; pure sulphuric acid does not give a precipitate with lime water.

Lime mixed with Food, Vomited Matters, and with

that found in the Digestive Canal.—Albumen, gelatine, bouillon, and milk, do not occasion any change in lime water. Red wine gives a violet-colored, tea a red ochre, and human bile a brown precipitate.

1*st Experiment.*—I mixed together a pint of bouillon, as much milk and coffee, and forty scruples of bile; this was saturated with lime water, and two grains of the hydrated alkali were added; the alkaline condition of the liquid having been proved by test paper, I dried the mass in a porcelain capsule, and treated the product for twenty or twenty-five minutes with boiling distilled water, which dissolved the free lime as well as the organic matters. The solution, of a reddish brown color, was filtered and evaporated until it was carbonised, and no longer gave out any smoke; the carbon was then incinerated in a platina crucible kept at a red heat for an hour, in order to change the carbonate of lime into quick-lime; by treating the ash with boiling water, a solution was obtained, which, after having been filtered, behaved like lime water with reddened paper, and with carbonic, oxalic, and pure sulphuric acids. If the ash is not heated sufficiently in the crucible, the lime will be in the state of carbonate insoluble in water, and, to discover it, the ash must be treated with weak nitric acid, and prove the presence of a salt of lime in the filtered nitrate.

The mass dried in the porcelain capsule, and treated already with boiling water, was heated for several minutes with pure nitric acid, diluted with five or six times its weight of water, in order to remove that portion of lime which may have been changed into the carbonate or oxalate of lime, by the acids or salts contained in the food; the nitric liquid was filtered, evaporated, and carbonised in a porcelain capsule; the ash was then incinerated in a platina crucible, and quick-lime obtained.

A similar experiment was made with a compound containing a quart of bouillon, a pint of milk, as much coffee and red wine, and about forty scruples of bile, without any lime being added. The result was that there was found as much quick-lime as in the previous experiment, owing doubtless to the soluble salts of lime contained in the boiling water, with which the food was prepared, and especially to the tartrate of lime, contained in the cream of tartar of the wine.

3*rd Experiment.*—A similar mixture of food without bile having been prepared, it was saturated with lime water, and twelve scruples of lime water containing half a grain of lime, afterwards added. The white of an egg dissolved in water was added to the mixture to render the liquid limpid on filtration; it was boiled for several seconds, and filtered when cold; the liquid was of a reddish yellow color, perfectly limpid and sensibly alkaline. Carbonic acid gas was passed through it without causing any precipitate; the liquid being slightly acid, heat was applied to drive off the gas, but it still continued acid and transparent. On the addition of the oxalate of ammonia, a precipitate of the oxalate of lime ensued, which, washed, dried, and calcined in a platina crucible, furnished quick-lime. The same experiment repeated without the addition of lime, gave the same results, only that there was rather less oxalate precipitated.

4*th Experiment.*—The same animal compound was mixed with a scruple of quick lime instead of half a grain. The mixture was evaporated to dryness, and the product treated with sixty scruples of cold distilled water, which were shaken together for a quarter of an hour, and the liquid filtered was strongly alkaline; a current of washed carbonic acid gas having been passed through it, it became turbid immediately, but the precipitate disappeared as the water became saturated with carbonic acid gas; the solution was boiled for several minutes to drive off the excess of gas, the precipitate collected, washed, dried, and calcined in a platina crucible at a red heat, when it yielded quick lime and its carbonate, but the quantity obtained was not by any means equal to that used.

It follows, then—

First, That when it is requisite to discover quick lime in a case of poisoning, we must, after having ascertained the alkaline condition of the suspected matter, evaporate it to dryness if it is not in the solid state, treat the product with cold distilled water, filter, and pass an excess of carbonic acid gas through the liquid; it must then be boiled for several minutes to precipitate the carbonate of lime, which must be washed, dried, and calcined in a platina crucible, when lime or its carbonate may be obtained; there is not in fact any liquid food or vomited matter, which will yield a precipitate of the carbonate of lime when carbonic acid gas is added, unless lime has been mixed with it.

Secondly, Serious mistakes may be made if the process pursued in either the 1st or 3rd Experiments be adopted.

Thirdly, The carbonic acid gas does not precipitate all the quick lime introduced into the stomach, because a portion has been changed into a salt by the free acids contained in the food or in the alimentary canal, and probably because another portion is retained by organic matters, with which it has formed a soapy compound.

Fourthly, It would be imprudent to declare that a person had not been poisoned by lime, because it could not be discovered by means of carbonic acid, because the poisoning may have resulted from a small quantity given before or after the ingestion of acid liquids, such as wine, &c., in which case the lime would be changed into a soluble or insoluble calcareous salt, which carbonic acid could not decompose. In such a case the expert must strengthen his opinion by corroborative evidence, such as the symptoms, cadaveric alterations, &c.—*Journ. de Chimie Médicale.*

MEDICO-LEGAL RESEARCHES ON THE BLOOD.

By Louis Mandl, M.D., Paris.

USE OF THE MICROSCOPE IN MEDICO-LEGAL RESEARCHES.

M. Orfila was the first who attempted to apply the microscope to the elucidation of questions connected with medical jurisprudence. In 1827 he speaks of this mode of investigation in his Memoirs on the Blood and Semen. It is to be regretted that his labors were not attended with better results; we shall presently explain the circumstances which prevented M. Orfila from deriving more benefit from his microscopic examination of the blood and semen: he discovered

animalculæ in semen which had been kept dry for eighteen years on glass plates, but when he examined the same fluid, dried on linen, after having mixed it with water, he came to the conclusion that it was impossible to discover any animalculæ.

M. Rattier (Jour de Chimie, Mars, 1837), being employed in investigating some spots on linen, moistened them with water, and found the *debris* of spermatic animalculæ and some animalculæ in a complete state. He mentions, that during the trial of Contrafato, Lebaillif had already employed the microscope for the purpose of examining spermatic stains on linen, but for reasons which are not explained these experiments were kept profoundly secret.

M. Ollivier (d'Angers) was the first who applied the microscope practically in a medico-legal investigation. In June, 1837, he was directed to ascertain whether any human hair was attached to the blade of a hatchet seized in the house of a person suspected of murder, and if this were the case, to determine the color of the hair. With the microscope M. Ollivier ascertained that the filaments attached to the hatchet were the hairs of an animal and not of a human being, and this was afterwards fully proved, (Arch Gen. de Med., Dec., 1838).

On the 20th of November, 1838, M. Devergie read a note before the academy on the signs of hanging during life, and pointed out the presence of spermatic animalculæ in the urethra; he also says that he found them in stains on linen, which had been dried for ten months; M. Devergie, however, observes that in endeavouring to separate the animalculæ from the linen we often destroy or so mutilate them as to render it impossible to identify them. M. Gaultier was directed, in June, 1838, in conjunction with MM. Labarraque and Ollivier to examine a quantity of adulterated opium; with the assistance of the microscope he not only detected the adulteration but also discovered the manner in which Smyrna and Egyptian opium are prepared (Arch. de Med., 1838).

M. Bayard (An. d'Hygiene, July, 1839) has made a series of researches with the microscope on semen dried on linen, &c. By taking care not to rub or injure the pieces of macerated linen he has been able to discover complete animalculæ in semen dried for two months, a year, or even three years. The structure and color of the tissues on which the sperm-stains are seated do not prevent our employing the instrument with success; for the animalculæ are easily detected on silk of all colors, cotton, thread, &c. They are, likewise, easily found in the vaginal mucus collected after intercourse between the sexes.

From what has been said it is evident that the microscope has been usefully employed in medico-legal researches; and hence I have been encouraged to apply it to a question of much importance, which every other means of investigation has hitherto failed to elucidate.

For example, we have some dried spots, which we know to be blood; but in the present state of our knowledge we are unable to say to what class of vertebrata the blood belongs. It is to this point, then, that I have directed my researches, and found that the microscope enables us to determine the characters of the different species of blood.

PHYSICAL, CHEMICAL, AND MICROSCOPIC CHARACTERS OF THE BLOOD IN DIFFERENT ANIMALS.

We all know that blood, when drawn from its vessels, coagulates and separates into the clot and serum. When a small portion of the clot is separated, it dries up completely and forms a solid, friable crust of a deep red color. This crust contains all the elements of the blood, except the water, which has passed off by evaporation.

Coagulated blood, then, is composed of clot and serum, but the circulating fluid contains different elements. When examined under the microscope we find that it is composed of corpuscles (*blood-globules*), floating in a yellowish red fluid. Now, what relation is there between the globules and *liquor sanguinis* on the one hand, and the clot and serum on the other?

The clot is chiefly composed of fibrin; it likewise contains blood-globules enclosed in their envelope. Modern researches also show that the liquor sanguinis contains fibrin in solution. When the blood is removed from its vessels, the fibrin of the liquor sanguinis coagulates, and, closing on a number of globules, forms the clot. The liquor sanguinis, thus deprived of its fibrin and globles, becomes serum.

Let us now examine the chief properties both of dried coagulated blood and of blood which circulates in the vessels, fixing our attention principally on the points connected with the subject of our researches.

The clot is red, and, from the serum which it has imbibed, soft. Its color is derived from the enclosed blood-globules, which latter, again, derive their color from the coloring matter (hæmatosine) of the blood; this matter dissolves when the clot is washed with water. The clot composed, as we have said, of fibrin and globules, parts with its color when immersed in water; but as the fibrin retains some of the globules tenaceously, frequent washing is required to remove all the color. We thus obtain a man of white fibrin, composed of filaments intersecting each other in all directions, and very small in proportion to the clot from which it is derived. The fibrin is heavier than water, and sinks to the bottom of a vessel containing it. These remarks will be found applicable when we come to speak of the chemical examination of blood-stains. Without entering further on this point we may say that fibrin thus prepared is insoluble in hot or cold water, but is very soluble in caustic potass.

The coloring matter of the blood easily dissolves in water by maceration of the clot, and this is a very important point in medico-legal researches. But the water thus impregnated with coloring matter contains, likewise, the elements of the serum enclosed in the clot. Now the chief constituent of the serum is albumen which we obtain by evaporating the serum; the albumen remains dry, but is soluble in cold water. When serum is gradually heated in a porcelain capsule it gets turbid at 65° and at 75° coagulates into an opaque mass, which is insoluble in cold or boiling water. But the appearance of the fibrin differs much accord ing to the quantity of albumen and water contained in the mass. When the serum contains a little water the albumen coagulates into flocci; if the quantity of water be increased, it forms a milky looking solution, the color of which becomes clearer as the water is more abundant.

We can now understand what happens when a spot

of blood is macerated in water. The coloring matter is dissolved, and falls to the bottom of the vessel in the form of red streaks; the dried albumen of the serum is also dissolved by the water, and when the red-colored fluid is heated, the albumen forms flocci, or merely gives a cloudy tint, according to the quantity of water employed in the maceration. Finally, the fibrin remains undissolved.

Let us now consider the principal microscopic characters of the blood, with a view of applying them to medico-legal questions.

If we place a drop of blood on a plate of glass, and apply another very thin plate over it, we obtain a transparent layer of blood, which affords many facilities for examination. If the blood be taken from one of the mammalia, we perceive round, flattened corpuscles floating in serum; their diameter never exceeds the hundredth part of a millimetre;* they are of a pale red color, inclining to yellow; these are the blood globules. Besides these we see another species of white mammellated corpuscles, having always the above diameter; these are the white fibrinous globules, or the *white globules*.

The edges of the blood globules expand on both sides, and there is a depression in the centre, giving them the appearance of a figure of 8. When we add a considerable quantity of water to the drop of blood already mentioned, and examine the globules after some time, we find that they have nearly altogether lost their color and their edges are now scarcely visible; the white globules have, on the contrary, undergone no change. The loss of color of the globules is proportionate to the quantity of water employed and the period of its action; thus, after half an hour, we find no trace of globules, which appear to be completely dissolved; but on adding a smal quantity of tincture of iodine, they assume a yellowish tinge, and reappear. They are not completely dissolved before the expiration of one or two days.

Hitherto we have spoken only of the blood of man and mammalia, but it is well known that the globules of oviparous animals are of a very different form; the globules of the camel tribe, however, are analogous to those of oviparous animals. Their globules are elliptical, instead of being round like those of mammalia, and their great diameter generally exceeds the hundredth part of a millimetre. They are flat and of a yellow color, but instead of the central depression, they present an elevation in the centre. This elevation is produced by a central nucleus of oblong shape, and granulated, which is the more evidently seen in proportion as the globules have been allowed to remain between the glass plates. When the blood of an oviparous animal has been dried in a thin layer, and the isolated globules examined, we get a perfect view of this central nucleus. On adding water the globules lose their color, but the nuclei remain unchanged.

Hence, if we examine under the microscope a portion of dried blood of a mammiferous animal, after it has been macerated for half an hour or an hour, we see nothing but one mass of fibrine, containing some white globules; but if the blood belong to an oviparous animal, we find all the nuclei distinctly visible.

MEANS OF DISTINGUISHING BLOOD FROM ALL OTHER SUBSTANCES.

Since the researches of M. Orfila the mode of distinguishing blood from every other substance is well known to medical jurists, but it may be useful to say a few words on this subject. To ascertain the nature of a suspected stain, we macerate it in cold distilled water, taking care to leave a certain space between the stain and the bottom of the vessel. If it be a blood stain, we soon see a number of red streaks, which descend and redden the lower portion of the fluid; the tissue on which the stain exists loses at the same time its color, and presents the appearance of a thin greyish layer, or of white, or whitish-red filaments. This is formed by the fibrin and insoluble portion of the blood globules; the red streaks are formed by the coloring matter of the blood, which has been discharged by the action of the water.

We have thus two parts essentially distinct; the macerating fluid and the filaments. The fluid becomes lightly red when stirred up with a glass tube; when gradually heated to near the boiling point, it becomes turbid, suddenly changes its color, and deposits flocks of coagulated albumen, or becomes opaque. If flocks are deposited, they are of a grey-green color, and without the slightest tinge of red, the supernatant fluid being colorless or of a yellow-green tint. If the fluid be filtered and treated with potass, it assumes a green tint with reflected light, and a rosy tint with refracted light. If, on the other hand, the fluid be not filtered, and potass is added, the same result is obtained. Now, there is no coloring substance in union with animal matter which produces similar phenomena. As for the filaments, they are soft, slightly elastic, and soluble in potass, and the latter solution, treated with chlorine and a little hydrochloric acid, throws down flocci of coagulated animal matter.

By these characters, and others which we need not enumerate, the chemist can always distinguish blood stains from all other spots (those of citrate of iron, for example, rust, &c.) M. Raspail, however, is of a contrary opinion, and says "that if you leave a bag filled with madder for two or three hours in the white of egg, and then dry it at a temperature of 25° to 30° C., a red stain is obtained exactly similar to a blood-spot." But M. Orfila has completely refuted this objection, which might easily be decided by testing with lime. Hence, there is no doubt that the medical jurist can distinguish blood stains from those produced by any other coloring substance.

CONSIDERATION OF THE MEANS PROPOSED TO DISTINGUISH THE DIFFERENT KINDS OF BLOOD FROM EACH OTHER.

In reference to one of M. Orfila's memoirs, M. Dulong remarked, in 1827, "that one of the most characteristic marks of a blood stain, even when old, is the form of the globules when examined under the microscope; with this instrument we can distinguish the blood of different classes of animals. The globules of dried blood of the mammalia present a white disc surrounded by a red circle, while in birds the white disc is surrounded by an elliptical globule." M. Orfila lost no time in verifying the assertions of M. Dulong, but his researches were not favorable to the use of the microscope. It results from the experiments of M. Orfila, "1, That, even admitting the blood to contain a number of characteristic globules, it is sometimes impossible to discover these globules in blood dried for any length of time on a piece of glass; and still more

* 0.443 of a line.

so when the blood lies on a piece of cloth, &c. 2, That although the globules of mammalia may be circular, and those of birds and cold blooded animals elliptical, yet when we examine dried blood from a piece of linen, we find elliptical globules in the blood of mammalia, and round or triangular globules in the blood of birds; this probably depends on the mixture of some foreign particles with the globules." The opinion formed by M. Orfila was derived from his imperfect method of examination, and since his experiments no others have been made for the elucidation of this subject, at least with the microscope.

M. Barruel, however, attempted to resolve the question by chemical means. On mixing sulphuric acid with blood he pretended that he could distinguish by the smell alone the blood of different animals, and even the blood of the male from that of the female. But, although the experiments of M. Barruel were fully confirmed by several other medical men, we must acknowledge that the sense of smell is too uncertain and fallacious a test to be applied to questions of medical jurisprudence; besides, for the experiment of M. Barruel a considerable quantity of blood is required, a circumstance which rarely occurs when the opinion of a medical jurist is required.

Hence, it results that we are not acquainted with any means of distinguishing the different kinds of blood from each other.

MODE OF DISTINGUISHING THE BLOOD OF MAN AND MAMMALIA FROM THE BLOOD OF OVIPAROUS ANIMALS.

When the medical jurist has decided that a spot examined by him is formed of dried blood, his task is not finished. The accused person may pretend that the stain was produced by the blood of a fish, a bird, or any other animal. I have just shown that we possess no means of distinguishing the blood of different species of mammiferous animals from each other, but my experiments enable me to affirm that we can distinguish the blood of this class of animals from the blood of birds, fishes, and reptiles. The following is the process which I adopt:—I have already mentioned that when a blood stain is macerated for some time in water we obtain the fibrine in a separate state: it is to this mass that we must direct our attention. Having prepared a piece of glass, like that used in other microscopic researches, we place on it a drop of distilled water, and then, with the point of a needle, scrape off some particles from the stain; we should choose in preference the edges of the spot, because here the dried blood is thinnest. The particles thus scraped off will be four or five in number, and not larger than pins' heads. They are next placed carefully in the drop of water, and allowed to remain for some time, until the coloring matter is removed; this generally occurs in half an hour at most. When the coloring matter is dissolved, we must remove some of the water by inclining the glass plate so as to let it run off over the edge; we then take a second plate, and place it carefully over the drop of water, avoiding any degree of pressure; persons accustomed to microscopic observations will soon be able to ascertain the quantity of water necessary for any given experiment.

We have now the particles, deprived of color and fixed between two plates of glass. The latter are placed under the field of the microscope. Our attention should be directed, at first, to the transparent edges, where we can examine the particles most readily. If the spots have been produced by the blood of a mammiferous animal, we now find an unorganised mass, enveloping some white globules; but if the blood be taken from an oviparous animal, we see a great number of oblong nuclei, closely applied to each other, in a coagulated mass of fibrin; the external edges of each globule are not visible. We thus distinguish easily the blood of a mammiferous from that of an oviparous animal; but the microscope does not enable us to distinguish the blood of man and other mammalia from each other, because the globules present no distinctive characters. The presence of hair, &c., may, however, furnish some useful information: thus we can easily distinguish the hair of a rabbit, ox, &c., from human hair.—*Gazette Med. de Paris*, September 3, 1842.

CASE
OF
GLANDERS IN A MAN,
PRODUCED BY THE
ABSORPTION OF MATTER FROM A HORSE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you deem the following case of glanders worthy of insertion, I beg you will give it a place in the "Provincial Medical Journal."

Yours obediently,

JOHN L. SCARBROUGH, M.R.C.S.

Sheldon, September 5, 1842.

In the latter part of May I was requested to visit Andrew Foot, aged thirty-six, of good constitution, and of rather spare habit of body. When I entered the house, I found him sitting on a chair in the kitchen. He told me he had had for several days a very troublesome place in the back part of his neck. On examination, I found a swelling (resembling a carbuncle), very hard, shining, somewhat œdematous at the sides, and black in the centre. I made some free incisions into it; ordered him to poultice it well, and gave him a little alterative medicine, and in a few days (June 3) the sore was quite healed. On the 6th he sent for me again; I found him laboring under severe pain in the head, with a hard pulse of 96 in the minute. I bled him to the amount of twenty-four ounces; gave him six grains of the hyd. submur., with ten grains of ext. colocynth. comp., which acted very freely on his bowels; he then found himself very much relieved, but complained of pain in his foot. Being served with a subpœna to the Exeter assizes, I lost sight of him for four days. On my return I visited him again, and found him in bed with his foot very much swelled; he told me he had been in so much pain that he was obliged to call in another medical man, who treated him for the gout (his foot had that appearance); however, in the course of two or three days the swelling appeared to have considerably lost its vitality, and became flabby; when punctured it discharged a quantity of sanious matter; several pustular spots appeared on the body, face, &c.; his foot became gangrenous; the pulse low, hard, and irregular; there was severe pain in the head; breathing difficult, with cough, and rigors. The foot continued to present a bad appearance,

surrounded by a high colored erysipelatous flush; wandering pains in the extremities; the pulse strong with thirst; the tongue became very tremulous, with considerable snuffling in the nose; the eyes and nose were very much tumefied; the snuffling very much increased; the expectoration was mixed with pus-like matter, which appeared to have been principally discharged from the nares by the mouth, as he was not able, from debility, to discharge it by the nose; also coma, with low muttering delirium. The tongue became very tremulous, as also the upper extremities; the pulse fluttering and thread-like; involuntary discharges; the swelling of the head and face considerably increased, extending down the throat; all which symptoms, after progressive aggravation, terminated in death. No post-mortem examination was allowed, but the body was in such a state as to oblige the friends to have it buried in a few days. The treatment was not conducted on any defined plan, but was varied according to circumstances, so as to meet the more urgent symptoms.

P.S. I could not discover any appearance of his having been inoculated, but having seen a glandered horse some time since, and thinking the above unfortunate case so much resembled that of the horse, induced me to inquire if there was any thing the matter with either of his horses, when he told me that one of them was laid up with a bad cold; on examining the animal, I found it had a profuse discharge from the nostrils, with the glands of the throat very much enlarged; it proved a decided case of glanders. The horse died in ten days afterwards.

TWO CASES OF BONY TUMORS.

By Jonathan Toogood, Esq.
Senior Surgeon to the Bridgwater Infirmary.

Case I.—A servant of Mr. George Baker, of Cannington, a remarkably strong woman, twenty-one years old, consulted me on account of a tumor occupying the whole space behind the left ear, which had assumed its shape, and extended to the angle of the jaw. It was so firmly attached to the skull that it was only by fixing her head very firmly, and grasping the tumor with both hands, I could perceive the slightest lateral motion—so slight, indeed, that another surgeon, who saw the patient with me, thought it quite immovable. We both thought it bone. I made an incision through the scalp, which proved that our opinion was correct; but it was so closely bound down by the pericranium, that it became very difficult to detach any part of it; at length, however, I succeeded in doing so all around the base, and found that it was connected with the mastoid process by a bony attachment. With considerable difficulty I got a strong spatula between the skull and the tumor, and holding the tumor firmly with one hand, whilst I was endeavouring to raise it with the spatula in the other, the patient, who had been very ungovernable during the operation, made a desperate effort to get away from me, by which the tumor was torn from its attachment. It proved to be a solid piece of bone, weighing three ounces. The operation was a difficult one, and attended with a good deal of hæmorrhage. The skull was smooth under the tumor, except at the mastoid process, which was rough, and appeared diseased. There was no exfoliation, and she recovered in a fortnight.

Case II.—In this case the tumor was situated on the metacarpal bone of the ring finger of a boy of sixteen, and had grown to such a size as not only to render the finger useless, but to impede very considerably the motions of the hand. As all treatment had been unavailing, the removal was recommended, which was effected in the following manner:—An incision was begun at the carpus, by which the middle and little fingers were separated from the diseased ring finger, whose metacarpal bone was turned out at its articulation at the carpus. Notwithstanding the numerous vessels which were divided in the operation, none required ligatures; the parts were brought together and retained by plaster and bandage, and speedily healed.

Bridgwater, April, 1842.

ON THE EMPLOYMENT OF ARSENIC IN THE PRESERVATION OF MORBID PREPARATIONS.

By T. Spencer Wells, Esq., R.N., M.R.C.S.
Assist.-Surg. to the Royal Naval Hospital at Malta.

Very soon after I entered upon the duties of assistant-surgeon to this hospital, in January last, several highly interesting specimens of diseased organs and tissues fell under my observation in the dead-house, and I was much disappointed (as, I have no doubt, many of your readers have frequently been), to find how quickly the appearance of the parts changed from loss or alteration of color after preservation in spirit. Whilst conjecturing how these changes could be avoided with due regard to economy, it struck me that, as the stomachs of persons poisoned with arsenic were found in a state of perfect preservation after a considerable time, and under very unfavorable circumstances, solution of the arsenious acid would probably fulfil the object I had in view. In the early part of February a liver, which was the seat of an enormous abscess, was sent to me by Dr. Galland, the able professor of anatomy and surgery in the University of Malta, the putrefactive process having considerably advanced. The size was such that I hesitated about incurring the expense of alcohol, and determined to try the effect of an arsenical solution. It is proved that when arsenious acid is treated with boiling water, that water, when cool, will hold a much larger quantity of the arsenic in solution than when cold water alone is used at first. I accordingly made a saturated solution in boiling water, and filtered the solution, when cool, upon the liver, in sufficient quantity to cover it. After four days the fœtor had diminished, but the solution had become turbid and blood-red in color. It was changed, and at the end of a fortnight the surface of the solution was thickly covered with a blue mould, and I again changed the solution. After a month, the same changes having taken place, the solution was a fourth time renewed, and I did not touch the preparation until yesterday. The experiment I then found to have been signally successful as far as regards the preservation of the liver; for in color, consistence, and general appearance, no alteration whatever had taken place; but the solution has entirely failed in

filling the place of spirit to show the diseased parts on the shelves of a museum, as it becomes so turbid that it is impossible to recognise what is within the jars. I am rather at a loss to explain the perfect preservation of the color of the parts with the deep coloration of successive solutions, but perhaps the blood contained in the larger vessels might produce the latter effect.

My next experiment was to try the comparative effects of arsenical solution and alcohol, and on the 12th of March last, having a kidney in a state of the most intense hyperæmia, I placed one half of it in alcohol and the other half in arsenical solution prepared as before. I did not touch these until yesterday; both liquids were very turbid, and on taking the parts from the bottles, I found the one from spirit much harder and whiter than at first, while that from the arsenic was nearer the natural state than I could have expected. During the months of April and May I made similar experiments with portions of brain, lung, liver, kidney, and intestine, in spirit, arsenical solution, spirit of turpentine, olive oil, and solution of the bichloride of mercury. In every instance the trial was in favor of the arsenic, with one exception, in which I treated a brain containing an encysted abscess with boiling spirit. The heat coagulated the blood and preserved the natural appearances very closely.

I have also made some experiments to determine if, after the natural appearances of parts have been for some time preserved by arsenic, they are still removed by subsequently placing these parts in spirit. This is of some importance in case it shall be found impossible to keep the arsenical solution clear enough to display preparations in a museum, and I regret that sufficient time has not elapsed to enable me to afford any satisfactory information on this point. I must say the same with regard to comparative trials of the solutions of the arseniate of potash, arsenious acid, and the arsenical paste. Perhaps it would have been better to have deferred this communication until time had given some value to these results, but removed as I am from the repositories of medical literature, I cannot learn if I have been preceded by any one in this investigation; and as I do not wish to waste time in determining a point which may be already settled, I have to request your insertion of this notice of a subject new, at least to me. I believe many preparations are lost, simply because parties will not incur the expense of spirit to preserve them. Now, the arsenical solution furnishes such persons with a cheap liquid in which the natural appearances can be more accurately preserved than in spirit. The parts may then be presented to some public museum, or removed from the jars when it is wished to examine them. I do not despair, however, of making some arsenical preparation answer every purpose of spirit; but in the mean time hope, that if some of your numerous correspondents possess information on this subject, they will communicate it to your readers, or that some one less engaged than myself in the purely practical duties of the profession will devote a period of leisure to its investigation.

Malta Hospital, August 6, 1842.

P.S.—I have applied heat in various ways to try its effect in preserving the color of parts by the coagulation of the blood, and will forward you the results in another communication, if time shall prove them to be of any value.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, SEPTEMBER 10, 1842.

The check which the late abortive attempt to re-enact the whole of the poor-law has received, affords opportunity for one more struggle, on the part of those medical practitioners who accept office under its provisions, to obtain more equitable arrangements. However Mr. Guthrie may felicitate himself on being the most successful reformer of the abuses introduced directly and indirectly by the commissioners and their assistants, and far be it from us to detract from his merits, it is still evident to every reflecting person, that, as regards really practical questions, much still remains to be accomplished. The abolition of the system of tender is a concession to the feelings of the profession, too loudly expressed, we may observe, to be resisted; the extra remuneration for the performance of certain capital operations is, under the circumstances, sufficient, and the attempt at reducing the extent of the districts and the amount of the services required within the limits of possible exertion, though not so successful as could be wished, is yet to be hailed with satisfaction, both as recognising a principle and as affording evidence of an intention on the part of the commissioners to retrace their steps.

It matters little whether these improvements have been forced or otherwise, whether they have been brought about by the personal influence of our new ally in the cause of reform or by the forcible and persevering representations of the Provincial and other medical associations. The concessions, however obtained, are of value, and not the less so because they afford the acknowledgment, that, with all its plenitude of power and wisdom, the commission can err, and that its regulations, happily for the medical profession for the suffering poor, and for the general welfare of these realms, have neither the force nor the stability of laws which alter not.

We are willing to believe, moreover, that the central commissioners have been misled by the representations of those from whom they have hitherto sought and derived their information,—that they have at length learned the lesson that their underlings are not in all cases to be trusted,—that the very senses, as it were, through which they receive impressions from without are, like those of the natural body, liable to error and not to be depended upon without careful and repeated testing of their accuracy. Much of the evil which has resulted from the operations of the commissioners, together with much of the outcry which has been raised against their proceedings, has, without question, been occasioned by the false impressions conveyed to them through the prejudiced views and distorted

representations of their agents. One of these gentlemen, the mouth-piece through which all their instructions have been so authoritatively given forth, has received a public reprimand before the House of Commons by the Home Secretary, and although the assistant-commissioners have as yet not participated in the fate of Mr. Chadwick, have not yet had a corresponding measure of justice meted out to them in public, it is not improbable that some private admonitions to the like effect may have been addressed to them from the same quarter.

The grand error committed, in the first instance, in regard to the medical arrangements entered into under the poor-law, was the selecting of a body of men to investigate and report upon a subject of the details and working of which they were profoundly ignorant. The charges allowed under the old system for medical attendance upon extra parishioners, having in some instances been made upon a scale proportionate. rather to the amount of the duty performed and the nature of the services rendered, than in accordance with the terms of the contracts for the home-paupers, appear to have excited in the minds of the poor-law authorities the idea that the salaries of the parochial medical officers were generally calculated on a like scale. A. B., an extra pauper, is the subject of a severe attack of illness, and requires constant attendance, medicines, and other appliances for several weeks. The medical attendant of the parish makes his charge, as he had a right to do, the case not being included in his contract, somewhat in proportion to the time, labour, and skill expended on the case. The assistant-commissioner examines the charge for the individual case, compares it with the charge for attendance on the parish generally, deems in his wisdom that the former is too high by one-third, one-half, three-fourths, or whatever it may be, and reduces the latter in like proportion. The charge for the extra parishioner, A. B., amounting perhaps to a sum equivalent to his own salary for one or even two days, is according to his view extravagant and extortionate, and therefore the contract for attendance throughout the year on the united paupers of the whole parish must be the same.

But further, though the assistant-commissioner is, in virtue of his profession, altogether unacquainted with the onerous nature of the duties of the medical practitioner, and consequently disposed to underrate their value, he has, perhaps, in the course of his university education, attained to the dignity and honor of wooden spoon at Cambridge, may, perchance, have been an optime junior or senior, or even a wrangler, or he may have been classed first, second, or third on the mathematical lists of the sister university. The junior barrister, fresh from the schools of his alma mater, and having just accomplished, with laudable diligence, the eating of his terms at some one or other of the inns of court, though his legal knowledge avail him nothing in the discharge of his newly acquired office of assistant commissioner, and his medical and other qualifications for the same office be null, can yet bring his mathematical or logical lore into requisition. He has studied the rules of proportion, direct, inverse, and duplicate, and he extends his principles of induction, before brought to bear, as we have seen, upon the charges, to the duties of the medical officer. The charge for the individual case has been, it seems, three times too high; the salary for attendance on the whole parish is consequently in like proportion, and must accordingly be reduced two-thirds. But, following up the application of the principle, it is then further inferred that the number of pauper cases attended must be small, and, therefore, that the size of the districts may be conveniently augmented in a corresponding degree. The charge for the extra parishioner is, it may be, £3; that for the parish, £30; the former should be reduced two-thirds, and the latter in like proportion, and, by our commissioner's rules of proportion, if £3 be the charge for one pauper, only ten can be attended for £30. Hence the duties of the medical officer must be very light, and may safely be increased, by the incorporation of other parishes, threefold, fourfold, or indeed, to any extent that the system of centralisation will admit of.

Having thus provided for the mapping out of their unwieldy districts—unwieldy both in extent and in population—and so made their calculations as to allot a stipend, for the services to be performed in each district throughout the union, little if at all greater than what had formerly been considered by the rate-payers (the best and most constitutional judges, we may observe) sufficient for a single parish, the next point is to force this arrangement upon the medical practitioners of the respective neighbourhoods. The unworthy and degrading means had recourse to, to compel these gentlemen to undertake the duty of attendance upon the sick poor, with extended requirements and at reduced salaries, it is not our purpose here to point out. We wish not to recal to recollection the heart-burnings, the jealousies, the sense of injury and injustice, excited from one end of the country to the other, by the incendiary practices of the commission in effecting this object. Some of the measures by which they accomplished their unworthy ends they have themselves since disclaimed; others they have been compelled to relinquish. Our present object should be to endeavour to remedy the mischiefs which have resulted, to obtain for the medical officer such a return for his services as shall prove in some degree remunerative, or at least shall protect him from positive loss, and ensure to the sick paupers that attention which their cases may require.

The value of a thing is so commonly estimated at its marketable price, that the expression has become

proverbial. The reasoning of the uneducated classes is often mainly founded on such expressions; and the application of the saying, "The value of a thing is what it will fetch," to the point in question, is fraught with every mischief which a narrow-minded and shorted-sighted policy could overlook. Not the least of these mischiefs is the direct tendency which it has to lower the confidence of the poor, and of the superficial thinkers among the rich, in the properly educated and legally qualified medical practitioner. All classes can understand why the physician or surgeon gives his attendance or his advice gratuitously to those who seek it. They can appreciate his benevolence, and are, in the main, grateful for the kindness shown to them. They can even understand why it is that honorary offices to public institutions are contended for with such avidity by those entering the profession; but when they find the general practitioner undertaking to bestow his services and to supply his medicines to an indefinite number of sick persons, scattered over a wide extent of country, for a sum of money averaging, for each case attended, little more than the price of a quartern loaf, and often positively less than they themselves are able to obtain by an equal amount of manual or bodily labor, is it to be wondered at that the regular practitioner is lightly esteemed by them, his remedies distrusted, and recourse had to any empirical pretender who may chance to come in their way? The increase of empiricism is loudly complained of; the evils resulting from it are becoming daily more apparent; but, while the empiric sets a high rate upon his own nostrums, and professes to value his services at something appreciable, and the regular practitioner dispenses his medicines at cost price, and estimates the value of his time, his labor, and his skill at nothing, can it be a matter of surprise that the rich, as well as the poor, should often agree with him, and resort to the empiric with a confidence, which the pretences at least, if not the judgment, of this latter will bear out?

But leaving out of consideration the impression which cannot but arise in the minds of all who are acquainted with the arrangements as to the value of medical skill, we would ask whether the commissioners can seriously and for one moment contemplate, that anything like an accurate investigation of the complaints of those for whom they profess to provide relief, or a fitting supply of remedial agents, can be afforded under the contracts so generally entered into. There is scarcely one among the whole tribe of the working lawyers who would listen to a statement, answer a question, or write a letter, without his six and eightpence, and a repetition of the same upon each successive occasion, and yet the medical practitioner is to be expected, required, nay compelled, if refractory, to attend upon, visit, supply medicines, perform minor operations, and enter into every other arrangement necessary for the relief of the sick paupers at a price varying from one shilling to five shillings at the utmost per case.

The poor-law commissioners may issue their orders, the assistants may superintend and direct, the boards of guardians may make their contracts, and the medical practitioners, influenced by threatened opposition, or other motives, may for a time be weak enough to become parties to them; but it is chimerical in the extreme to expect that the pauper patients as a body can receive the amount of relief which their cases require for any such miserable pittance. Neglect must occur, the visits will be few and far between, the medicines supplied of inferior quality, or not in sufficient amount, disadvantageous substitutes for costly drugs had recourse to, and moreover, what is worse, these practices justified by the niggardly parsimony with which the services rendered are nominally remunerated. But if otherwise—and we doubt not that the humanity and high feelings which characterise so many of the medical profession, and upon which, notwithstanding the vituperative language used towards them, it is manifest the commissioners mainly depend for the due fulfilment of these contracts, will supply so many examples of pure and disinterested benevolence, as to constitute attention to the poor the rule rather than the exception,—how shamelessly unjust is it, how utterly unworthy of the community, how inconsistent with the high pretensions so ostentatiously paraded, that public charity should thus be exercised and dispensed mainly at the cost of a class of men who have ever shown themselves so ready to answer in private the numerous gratuitous calls made upon their time and their skill.

We are ourselves no party to any of these arrangements; we have no personal interest in any of these questions; but we protest that as citizens and rate-payers we blush when we think of the unwilling part we are compelled to play, in thus uniting with others to under-estimate the public services of our medical brethren, and to obtain, in too many instances to compel, those services for a salary which is not even remunerative of actual expenses, leaving the time and labor and skill bestowed, or required to be bestowed, wholly out of consideration.

The adequate remuneration of the medical practitioner for attendance on the sick poor is a practical question; it is one intimately mixed up with the immediate welfare of the profession, and we will add, also, with its dignity and with its usefulness to the public in general. We trust, therefore, that a united effort will be made to obtain something like, we will not say an advantageous, but a just arrangement for the future, and if those who are high in influence amongst us, who have access to the members of either House of Parliament, will but take the trouble as

occasion serves to place this matter in a correct light, there is reason to hope, that when the subject comes to be discussed in the ensuing session, more liberal and more just provisions will be framed than those upon which the commission has hitherto acted.

IRISH CHARITIES' BILL.

The last number of the "Dublin Medical Press" contains the long expected bill "for the better regulation and support of medical charities in Ireland." We shall endeavour to give an abstract of the principal clauses which are likely to affect the medical profession.

The first clause constitutes a "Medical Charities' Board," to be appointed by the Lord Lieutenant, and composed of not less than five and not more than seven physicians and surgeons, who shall have practised as such for not less than *ten* years previously. The duties of this medical board are to make reports connected with the medical relief of the sick poor, and to issue orders for the medical economy and management of dispensaries. Under the medical board, but appointed by the Lord Lieutenant, there are to be *four* physicians or surgeons of *seven* years' standing in the profession, whose duty will be to inspect the medical charities of Ireland.

The poor-law commissioners are to make all orders and have the control of all matters connected with the expenditure of money, &c., for the relief of the sick poor; but the orders of the medical board and of the commissioners must, under certain restrictions, be sanctioned by the Lord Lieutenant.

The poor-law commissioners, with the consent of the viceroy, may divide the country into dispensary districts, &c., for poor persons affected with fever or other contagious diseases, and arrange, or break up, or modify the districts, according to their judgment.

The dispensary districts are to be placed under the management of two species of governors: the first are *ex-officio*, and include the regular poor-law guardians, justices of the peace, rector or curate, and the principal officiating minister of each religious denomination, residing in the district; these are the *ex-officio* governors. The other class of governors is composed of persons (resident or not), who pay a donation of £20 or a subscription of not less than £2; the former being life, the latter annual governors. They are not to vote (save in the first elections) until they have been governors during twelve months previous to the election.

The governors are to hold and purchase lands, &c., and enter into and execute the contracts connected with the medical relief of the poor, subject to the orders of the Lord Lieutenant, the medical charities' board, and the poor-law commissioners. The governors are to appoint the medical and other officers of the dispensary and fever districts, whose salaries are to be paid out of the poor-rates; the commissioners regulating the amount of salaries, duties, &c., of all the said officers, *except* the medical ones. Upon application in writing being made by any one poor-law commissioner, assistant-commissioner, or medical inspector, or of any four governors, the Lord Lieutenant may remove any paid medical officer, and require a fit officer to be appointed in his place, or in default appoint one himself.

The sums necessary for the building of fever hospitals, dispensaries, &c., may be raised, under order of the Lord Lieutenant, from the poor rates of the respective districts. The physicians to dispensaries must have obtained letters testimonial, or the license of the College of Physicians, in Ireland, or the diploma, license, or degree of some other college or university in Great Britain or Ireland, duly authorised by statute or royal charter to grant the same.

The surgeons must also be qualified by some college or university in Great Britain or Ireland duly authorised to grant licenses, &c., in surgery.

Apothecaries must be members of the Dublin or London Societies. The Lord Lieutenant may order that any medical attendant must possess more than one of the above qualifications, and likewise the certificate of some hospital proper for a practitioner in midwifery.

We had omitted to notice the clauses relative to the dispensaries and fever hospitals now existing throughout Ireland.

Whenever any dispensary or fever hospital district has been declared formed, then every dispensary and fever hospital now existing in the district, and either wholly or partially supported by grand jury grant or compulsory rate, with all the chattels and income attached is to vest in the governors before mentioned, but it will be supported in the manner in which it is maintained at the time of the passing of the act, unless the poor-law commissioners direct otherwise. The medical officers of the now-existing dispensaries and hospitals are to continue in office with the proviso, that if not qualified in the way directed in the act, they shall, within *three* months, obtain a certificate from the medical board of competence and fitness for office.

The penalties comprised in the bill are various, but the most important one is contained in the 67th section, which ordains that if "any person shall wilfully neglect or disobey any order of the Lord Lieutenant, poor-law commissioners, or their assistants, or of the medical charities' board, made in conformity with the act, he shall, if convicted before two magistrates, be fined forty shillings, or three or five pounds.

ON THE STRUCTURE OF FIBRINE.

[Abridged from Mr. Gulliver's Contributions to Minute Anatomy—Lond. and Edinb. Phil. Mag., for August, 1842.]

The author referring to his description and plates, in the English version of Gerber's Anatomy, of the fibrils and the organic germs or nucleated nuclei in pale or colorless clots of fibrine, now figures similar corpuscles, though of a ruddy color, in the red parts often found towards the edges of such fibrinous clots. He is disposed to regard all these germs as nearly allied to blood corpuscles, especially as Dr. Barry has so pertinently asked, how many tissues there are that the corpuscles of the blood may not form? It is remarkable, however, that both the ruddy and the pale organic germs of fibrinous clots are irregular in shape, and exhibit nuclei when treated with acetic acid, while precisely the same treatment does not show any nuclei in the free or floating blood discs. If, therefore, the organic germs in fibrine be blood corpuscles entangled in the clot, these corpuscles must have undergone changes both in form and in chemical characters. A figure is given in which the germs are exhibited in a net-work of delicate fibrils, together with many very minute circular molecules. The fibrils are also depicted in the fibrine obtained by washing from the blood of the oviparous vertebrata, which fibrine is further characterised by containing many particles similar to, and probably identical with, the nuclei of the blood corpuscles.

ON THE NUCLEI OF THE BLOOD CORPUSCLES OF THE VERTEBRATA.*

When the corpuscles of the oviparous vertebrata are mixed with water, or with dilute or strong acetic acid, the nuclei are instantly exposed in the clearest manner, appearing thick, oval or spherical, and much smaller than their envelops. Several other vegetable acids and sulphurous acid may be used with the same effect; and the nuclei may also be readily shown by gently moistening with the breath some dry blood on a slip of glass. But when the blood corpuscles of man and other mammals, not excepting the oval discs of the camelidæ (see Med. Chir. Trans., vol. xxiii, and Lancet, vol. ii., p. 101, 1840-41), are treated by any of the means just specified, and precisely under the same circumstances, no similar nuclei will be observed, unless in very young embryos; for the corpuscles of these enclose a temporary and obvious nucleus which corresponds to the persistent nucleus of the corpuscle of oviparous vertebrata. As stated by the author in the appendix to Gerber's Anatomy, pp. 13 and 30, this does not prove that the corpuscles of mammals have no central matter, although he infers that these corpuscles have no nucleus like that contained in the corpuscles of the lower vertebrate animals.

The author then gives two figures to show the effect of several reagents, and especially of repeated washing with water, till all the coloring matter is removed, on the corpuscles of mammalia and of the lower vertebrata. He shews, as he had formerly stated (Phil. Mag. for Feb. 1840, s. 3, vol. xvi., pp. 160-107), that the corpuscles of man, for example, are merely reduced about one-third or one-fourth in size after completely removing their coloring matter by repeated additions of large quantities of water, when the washed corpuscles appear very faint, flat, and pellucid, presenting no appearance of a nucleus even when treated with acids and other reagents; nor do these washed blood discs agree in any respect with the particles which have been commonly described as the nuclei of the blood corpuscles. Now, when all the coloring matter is removed in like manner from the corpuscles of any of the lower vertebrata, the goose for example, both the envelops and nuclei remain, are easily distinguishable as distinct parts, both appearing circular, and the nucleus with its component molecules or nucleoli. When exposed by acid the same nuclei present an oval form. Dilute muriatic acid scarcely affects the form of the envelop, but shows the nucleus with an appearance of granular matter around it. The same acid makes the corpuscles of a mammal appear puckered or shrunk, notched at the edges or granulated; some presenting a distinct central spot, irregular at the margin like a granular nucleus; others remaining smooth but misshapen, generally with a dark or brilliant central spot, according to the focus in which they are viewed.

* Abridged from Mr. Gulliver's Contributions to Minute Anatomy—London and Edinb. Philos. Mag., August 1842.

MEDICAL PUBLISHING SOCIETY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—Will you permit me to make a few remarks on your report of my proposition for the establishment of a medical publishing society, on the plan of the Camden and Parker Societies, which appeared in the last Number of the "Provincial Journal." On the whole I am gratified at the reception my proposition met with at Exeter. I never expected the Provincial Association, as a body, to support the plan; my chief object in bringing the suggestion before the meeting was, to elicit remarks from some of the influential members of our profession. I am aware that the Parker Society consists at present of upwards of 5,000 members; and if the society I am advocating required an equal number of subscribers I should indeed despair of success; but the Parker Society was in a sound working condition long before it had reached its present magnitude. At first the number of subscribers was limited, and it was only at the request of many persons anxious to join it, that its boundaries were enlarged, and an additional number of members admitted on payment of a larger sum than the original subscription of 20s. for the books already published. The Camden Society was, I believe, limited at first to 1,000 members. Its popularity soon induced the council to increase the number. I merely mention these facts to show, that a medical society similarly constituted is practicable. I cannot think Dr. Boisragon has argued successfully against the proposed society. If it be granted that 150 copies of "Swan's Sydenham" may be procured by hunting through the old book stalls in London, medical practitioners know full well that they have neither time nor opportunity for such diligent research, and that

the most diligent search would frequently fail in procuring the medical writings of many of our best authors whose works have never been collected, but are scattered through the transactions of various societies. The great beauty of the proposed society is this—that, without trouble on the part of the subscriber beyond the simple payment of his guinea, four thick 8vo. volumes will be brought, as it were, to his very door, and he will thus have the satisfaction of seeing his shelves become annually richer and richer in the stores of medical literature. I was not aware that a proposition similar to my own had ever been made before; but I find from the remarks of Dr. Forbes, that "a prospectus, containing a proposal of the kind, was issued some years ago." Perhaps its fate would have been different had the Parker and Camden Societies been established at the time.

I have the honor to be, Gentlemen,
Your obedient servant,
Ferguson Branson, M.D.

Sheffield, August 22, 1842.

PROFESSIONAL ETIQUETTE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I am again obliged to trespass on your kindness, in reply to Mr. Elliot's letter of the 27th ultimo. That gentleman accuses me with being guilty of "wilful misstatements;" such a gross accusation I repel with contempt, and still assert that Mr. Elliot acted unprofessionally in enticing a patient from under my care. With respect to the evidence he brings forward, in an attempt to exonerate himself from blame, I altogether repudiate, and protest against it *in toto*, as being *exparte*, and taken by incompetent persons—viz., Mr. Elliot's partisans. Pray, Gentlemen, would such evidence be admitted for one moment in a court of law, or by any set of individuals desirous of eliciting the truth? With respect to the patient's evidence, I cannot think he was fit to be interrogated, being, from the nature of the operation he had undergone, debilitated both in body and mind; and I shall prove he has visited on me what his ordinary acquaintances told him. * * * * * * *

Mr. Irving, the patient's father, on the 3rd instant, in the presence of more than one respectable person, gave me the following conclusive evidence:—

"I considered my son Mr. Reeves's patient till Mr. Elliot sent for, and told me that the stone might be taken away by dilating the canal, and, at any rate, that he could make a cure with less danger to life than the old method of cutting, and, where life was at stake, the safest plan should always be adopted. I never thought of consulting Mr. Elliot till he made the above promise to me; but I had talked about my son in a friendly way to the doctor of a club I belonged to, and asked whether he thought a cure could be made without cutting. By want of confidence in Mr. Reeves, I only meant as related to the question whether a cure could be made without cutting. I had been told by persons it might, by taking medicines. My son had an inclination to enter the infirmary, and Mr. Reeves frequently pressed me to decide about it, as he said the sooner I did so the better."

It appears from the above that the boy had an unsettled inclination to enter the infirmary, and I pressed him to decide upon it, which argues a desire, on my part, to have retained the patient, free from the imputation of "kidnapping." There are three physicians and three surgeons attached to the dispensary, ready to give gratuitous advice when required. But Mr. Elliot's uncalled for interference excluded any chance of the proper medical officers exercising their pleasing duty in the present instance.

I have authority to show that what is given, as said by me concerning Mr. Elliot, was the result of a conversation between the patient and Thomas Little, and that it was the latter, dwelling upon his opinion of Mr. Elliot's practice, told the lad he would be ruined if he went to him, as Mr. Elliot had signally failed in a late operation.

As to the statement made, that I told the boy Mr. Page would cut him at home—that two children had been cured of stone in the infirmary—that an operation on him would be attended with less danger than on children, and such like sentiments—I disclaim them, and avow that they are false. * * * * *

The accompanying letter, from Mr. Murison, surgeon to the dispensary, will show in what estimation Mr. Elliot's *exparte* evidence is to be held.

I remain, Gentlemen,
Your obedient servant,
William Reeves, M.R.C.S.L.

Carlisle, September 5, 1842.

"Carlisle Dispensary, Sept. 5, 1842.

Dear Sir,—I have read your statement in the "Lancet" of August 13. I can corroborate it, inasmuch as I have repeatedly heard you tell the young man, Irving, that you would operate on him at home, but if he thought he would not be comfortable enough at home, that you would get him into the infirmary. I myself have frequently asked him if he had made up his mind as to whether you should perform the operation or not at his own house. The young man told me, in the presence of two other individuals, that Mr. Elliot told him he could cure him without cutting—that there were two stones in his bladder, and that he would surely die if he allowed himself to be operated on, and that Mr. Elliot read a statement to him, by which it appeared that seven out of eight operated on died.

I remain, Sir,
Yours very truly,
Taylor H. Murison.

To W. Reeves, Esq., surgeon, &c."

*** We publish the letter of Mr. Reeves, having omitted one or two passages which are irrelevant to the subject; we decline inserting any further correspondence from either party.

LITERARY INTELLIGENCE.

Mr. Churchill will shortly publish a System of Practical Surgery, illustrated with 220 wood-cuts, by Professor Fergusson, of King's College.

RETROSPECT OF THE MEDICAL SCIENCES.

PECULIAR CAUSE OF MENORRHAGIA.

A lady was subjected to menorrhagia since her last labor, which was an abortion, and attended with many untoward symptoms; the placenta and secundines did not come away for several weeks afterwards, their retention causing utero-vaginal inflammation, and fetid and acrid discharges. The mucous membrane of the vagina, after the separation of the placenta, was observed to be denuded of its epithelium, and continued so for some time. The patient, while in bed from this complaint, lay constantly on the left side, with her legs drawn up, and when she had so far recovered her strength as to be able to sit up, she was unable to place the trunk in an erect posture, either sitting or standing, but was incorrigibly inclined a little to the left and forwards.

This state continued, and, in addition, each menstrual period was marked by menorrhagial discharge, each attack increasing in severity on the previous ones, and being followed on its cessation by distressing fluor albus. The periods were always preceded by more or less acceleration and force of the pulse, flushing of the cheeks, headache, pain of the loins, hips, and groins, more especially the left; torpor and uneasiness of the bowels, sickness of the stomach, and a peculiar uneasiness of the uterus, compounded of pain and "drawing," and inability to sit or stand erect.

On examination by the vagina, the cause of this painful and exhausting complaint proved to be a displacement of the uterus downwards, backwards, and to the left, the organ being secured in this situation by firm adhesions to the vagina. The inferior of these abnormal connections was of the form of the frænum linguæ; one was fully an inch in length, and three-fourths in width, drawing the cervix uteri downwards and backwards more than two inches. The adhesions of the left side were more extensive; they occupied the whole of the left side of the cervix and os tincæ, drawing and fixing the uterus in that direction more than fifteen lines, and were firm and strong; the mouth of the womb was rendered permanently dilated by them. The examination was very painful, and it could be plainly seen that these adhesions were put upon the stretch when the lower extremities were extended, causing pain and sickness at the stomach.

In the belief that they were the cause of the menorrhagia, and of all the other attendant symptoms, it was determined to divide them, which was effected without causing very intense suffering, Weiss' three-bladed speculum vaginæ being used to bring the parts into view, and a delicate scalpel, supported by a long handle, to divide them. As soon as the operation was completed, the lady could stand perfectly erect without pain or uneasiness, and she could also flex the body to the opposite side, which she had not been able to do before since the abortion. The incisions were kept open by interposing lint, and passing the end of the finger through them several times daily, until they cicatrised.

Other remedies were employed to improve the general health, such as aperients to remove the torpor of the bowels, cupping to relieve the spinal uneasiness, astringent injections for the leucorrhœa, and finally, the nitro-muriatic mixture, to improve the appetite, and stimulate the liver to healthy action. The patient recovered, and had not any return of the menorrhagia.

This case, which is a very interesting one, points out the necessity of a vaginal examination in cases which resist ordinary means of treatment.—*Dr. Mettauer, American Journ. Med. Sci.*, April, 1842.

HYDATIDS OF KIDNEY AND LIVER.

The following are the post-mortem appearances in the abdomen of a woman, 102 years of age, whose body was examined in the Marylebone Infirmary:—A hydatid cyst, filled with a dry, cheesy-looking substance, was found on the anterior edge of the left lobe of the liver, of the size of a pigeon's egg, and one still larger in the substance of the right lobe, surrounded by a thick opaque membrane. They were examined by Mr. Gulliver, who ascertained the contents to be chiefly the phosphate of lime, with a small quantity of the carbonate, the cysts themselves being the remains of entozoa, most likely of the species echinococcus. The upper part of the left kidney was covered with a thick, white, semi-ossified capsule, beneath which, in the kidney, was a large hydatid cyst, containing matter similar to that in the liver. There were ossific deposits generally throughout the organic and circulatory systems.—*Edin. Med. and Surg. Journ.*, July, 1842.

PREPARATION OF MERCURIAL OINTMENT.

Mr. Redwood brought before the notice of the Pharmaceutical Society some lard prepared in a peculiar manner, for the more speedy oxydation of mercury. The process he adopts is as follows:—The lard is melted in an earthen pipkin, and, while in a fluid state, poured in a thin stream, from some height, into a vessel containing a considerable quantity of cold water. The lard diffuses itself in a thin stratum over the surface of the water; it is now to be collected and placed in a coarse hair sieve, and the top of the sieve to be covered with paper, to preserve it from the dust. In this state it should be kept in a dry apartment, exposed to the action of the air for two or three months, at the expiration of which time it will be found to have acquired the property of readily combining with a very large proportion of mercury. This process was first suggested by M. Dorly, a French chemist. Mr. Redwood then exhibited some lard thus prepared, and demonstrated to the society its advantages in combining with the metal with less labor and loss of time than is usually incurred.—*Pharmaceutical Journal.*

FUNGUS HÆMATODES.

Dr. Byron, the surgeon to the County of Meath Infirmary, has published an interesting case of fungus hæmatodes, extending within the cranial cavity, unattended with pain, paralysis, or any manifest disturbance of the mental faculties. It occurred in the person of a child, about four years old, who at first presented merely symptoms of ill health, but which became afterwards indicative of cerebral affection, manifested by slight strabismus and ptosis of the right eye and eyelid, feeble and irregular pulse, sluggish

pupil, &c., giving rise to a dread of impending hydrocephalus. From the commencement of the attack the sense of smell was absent, while that of hearing was preternaturally acute. In the course of a few weeks he became blind, the sight being lost one morning, returning in the course of the day, and permanently lost the next day. Both eyes were fixed and immovable, with the lids hanging over them. The pupils were clear, the irides acting irregularly. The two front incisor teeth were separated, and a dark-colored tumor was discovered occupying the line of the palatine suture; it was firm and elastic to the touch, and its fungoid character was soon recognised. From this period all the symptoms advanced rapidly, but with regularity; the tumor in the palate extended itself, so as to protrude outside the mouth to the size of a goose's egg; the eyes lost their brilliancy, for which in health they were remarkable, and were converted into two dark-colored fungi, protruding in a hideous manner outside the lids; the nose was flattened, and spread out upon the front of the tumor, not the slightest elevation or prominence appearing in its place. The nasal and malar bones could be felt floating wide apart upon this sponge-like mass of disease. Notwithstanding the presence of such extensive disease, the act of deglutition, although difficult, was performed with amazing facility; the poor little boy could also articulate intelligibly, and was sometimes jocose; the mental faculties were perfect to the last.

On examination of the body, the brain and its membranes presented marks of preternatural vascularity; the ventricles contained a small quantity of serum. The anterior lobes of the cerebrum having been raised, a firm, elastic tumor, covered by dura mater, presented itself, occupying the entire extent from the anterior edge of the cribriform plate of the æthmoid bone to the foramen magnum; in extent and bulk it was fully equal to the segment of a goose's egg, being convex towards the brain. On stripping off the dura mater, there was seen a pale, whitish-looking mass, but slightly elastic, and in some places cartilaginous; a section of the tumor displayed some black spots or patches of equal density with the rest of the disease; there were not any traces of bone or other normal structure. All the facial and the coronal sutures were open, the frontal and orbitar bones being intact, except the os planum and the os unguis, which had entirely disappeared. The disease, as it presented itself at the eyes and mouth, was less firm and darker colored than elsewhere. The eye was totally disorganised.

The disease occupied the entire space from the base of the cranium, a considerable portion of the cavity of which it filled, to the mouth, nose, and eyes, finding its way into the frontal sinuses, the antrum of Highmore, and pharynx, converting into its own nature all the soft parts within its reach, and the following bones: the entire of the æthmoid and sphenoid bones, except the temporal wings of the latter; the superior maxillary bone, except its orbitar plate, nasal processes, and the sockets of the teeth, which last were untouched; the basilar processes of the os occipitis, the os unguis, part of the palate bones, and all the spongy and turbinated bones.—*Dublin Medical Journ.*, July, 1842.

THE RELATIVE SIZES OF THE TRUNKS AND BRANCHES OF ARTERIES.

It was long generally believed that the area of a transverse section of the trunk of an artery is less than the sum of the areas of sections of the branches proceeding from it; in other words, that, taking the whole arterial system together, and considering the interior of the aorta, and of all the branches of a certain size which successively arise from it as one cavity, its form might be compared to that of a cone, with its apex at the heart, and its base at the terminations of the systemic arteries. This opinion was controverted in 1839 by Mr. Ferneley, who believes, from eight measurements which he made, that the joint areas of sections of branches are in general equal to the area of the trunk.

With the view of elucidating this question, Mr. Paget instituted a series of observations, from the results of which he draws conclusions at variance with the opinion of Mr. Ferneley, and that generally entertained. He considers that there is not one constant relation of size between arterial trunks and branches; that in some cases the area of a transverse section of the trunk is less, in others more, than the sum of the areas of sections of its branches; but that, for similar arteries in different persons, the same relation generally holds. The experiments were made on uninjected arteries.

He finds that the area of a transverse section of the trunk of the aorta, just after it issues from the pericardium, is to the sum of the areas of the transverse sections of the three great branches, and of the distal part of the arch, as 5.8289, 6.1535; in other words, the arterial stream, in passing from the beginning to the end of the arch of the aorta, and into the main trunks arising from it, grows wider in the proportion of 1 to 1.055. When the innominata divides, there is a further widening of the stream. The area of the trunk is to the joint areas of the branches, as 1 to 1.147. The internal carotid is much larger at its commencement than in its further course, its first half inch being almost funnel-shaped. All the measurements, therefore, were made in the part where it is nearly cylindrical; and from these it results that the area of a transverse section of the common carotid is, to the joint areas of sections of its branches, as 1 to 1.013. In this proportion, therefore, the stream continues to grow wider in branching. The area of a section of the external carotid is, to the joint areas of sections of its branches, as 1 to 1.19. From three measurements it resulted that the arterial stream, in passing along the trunk of the subclavian artery, and in branching from it, enlarges at the rate of from 1 to 1.055.

It may, then, be considered that the arterial stream, as it proceeds towards the main branches of the head and upper extremities, becomes regularly larger in the proportion of 100 to 108.

The average enlargement of the stream in passing along the abdominal aorta, and into all its branches, before it divides into the iliac arteries, is in the proportion of 1 to 1.183. When the aorta divides, the stream is almost invariably contracted. To this there was but one exception in seventeen observations. Taking all together, the average diminution of the stream at this division is as 1 to .893. At the division

of the common iliac arteries, there was an average decrease in the proportion of 1 to .982, so that the rule of a contraction of the current in passing to the lower extremities was corroborated. The branches of the external iliac give, on the whole, an enlargement of the stream in the proportion of 1 to 1.15; but the variations are not constant, and when the branches arise in a cluster from the trunk, the enlargement is very great.

It appears, then, that the old rule of the enlargement of the arterial canal, as trunks divide into branches, is mostly true, but not to the extent generally supposed, and there is a constant exception where the aorta divides into the common iliac arteries, for there, or at the next division, the stream is always contracted.

The effect of this contraction, Mr. Paget observes, must be to increase the velocity of the current, not only in the iliacs, but in the arteries given off from the trunk above them, such as the mesenteric and the renal; and he considers that this acceleration of the circulation through the kidneys, and the organs whence the roots of the portal veins are derived, is the special object of this contraction.—*Medical Gazette*, July, 1842.

DENGA, OR DANDY FEVER.

This singular epidemic, which received its name from the negroes of St. Thomas's, being so christened from the stiff, affected gait of those who labored under it, made its first appearance in the latter part of 1827, in the Caribbean islands. Extending westwards, it soon spread over the West Indies, and appeared next year on the neighbouring coast of the United States. In the spring and summer of 1828, New Orleans, Pensacola, Savannah, Charleston, &c., suffered a severe visitation. Some cases are reported to have occurred at Philadelphia and New York. Its progress was remarkable for its universality of attack, very few of the population invaded by it escaping it, and very few deaths occurring in consequence of it. Towards the close of 1828, it suffered a gradual extinction, and, like the black death, the sweating sickness, and cholera asphyxia, it soon disappeared, leaving behind nought save the terror of its name. Surgeon Lawson, writing of its invasion of Pensacola, says, among the Americans, and other persons of vigorous health, the fever usually ran very high, and continued without a remission from twenty-four to thirty-six hours, after which it subsided, leaving the patient in a state of extreme debility and laboring under an acute rheumatic affection of the muscular system generally. Among the Spaniards, who are less plethoric, the febrile manifestations were, on the contrary, much less intense; but the disease was of much longer duration, and the pains throughout the fibrous tissues were infinitely more severe.

Denga was usually ushered in by the common manifestations of febrile diseases; its accession was marked by a painful affection of the joints and muscles, attended by fever of the ordinary inflammatory type. The fever generally declined and disappeared on the second or third day, and the arthritic pains diminished in severity with the subsidence of the febrile exacerbation. The paroxysm terminated in an abundant perspiration, attended occasionally with a rash or miliary eruption, which, however, was regarded as an incidental symptom. This lull was, however, deceptive. On the third or fourth day, the fever having generally intermitted, the tongue began to show a yellow fur, and the stomach manifested considerable oppression, with nausea, and sometimes vomiting, which symptoms were relieved in a day or two by a cutaneous eruption, which, in the hue and aspect of the skin, resembled scarlatina more than measles, but was less confluent than either. It consisted of minute papulæ, of a florid red, slightly elevated, and distributed in irregularly-shaped patches; it appeared first on the face and trunk, and spread thence to the extremities. A second febrile exacerbation, attended with severe arthritic and muscular pains, supervened on the full development of this exanthema. After two or three days' duration, the eruption gradually disappeared, with some desquammation of the cuticle. In the neck, groin, and axilla, the lymphatic glands became not unfrequently enlarged and inflamed, and often continued so, as did a painful affection of the joints, for weeks and months after convalescence, leaving the sufferer hardly able to move, and causing the stiff and constrained gait which gave the disease the quaint name it bears.

The denga may be fairly classed among the exanthemata; it is an eruptive fever of a distinct and specific character, united with an inflammatory affection of the joints. With regard to its origin, one class of writers refers it to an epidemic constitution of the atmosphere, while another maintains it to be a malady of a specific and contagious nature. In support of the latter opinion, its career was stated to be uninfluenced by season, locality, or atmospheric change, and its progression gradual from place to place, following the great route of commercial intercourse. By other writers it was considered to have some analogy with bilious remittent or yellow fevers.

The treatment pursued did not admit of much diversity of opinion. The lancet was employed at the commencement of the inflammatory attack, and cathartics and diaphoretics were almost universally prescribed. Anodynes, in the form of opium and Dover's powder, were generally resorted to with the most happy effect.—*Dr. Forry, American Journal Med. Sci.*, April, 1842.

THE MUSCULAR COAT OF THE STOMACH.

Dr. Guéneau de Mussy has published the results of his investigations on the disposition and relative arrangements of the muscular fibres of the stomach. The viscera which he dissected had been previously the subject of contraction of the pylorus, so that considerable hypertrophy of the muscular coat existed in each case.

Modern anatomists admit three layers of fibres in the stomach—the first superficial or longitudinal, the second circular, and the third parabolic. Dr. Guéneau de Mussy considers that there are four in reality, if the number of these layers is to be determined by their direction and origin; two of these are superficial, the other two deep-seated. He is further of opinion that one of the superficial and one of the deep-seated layers arise respectively from the œsophageal and pyloric extremities of the viscus, the fibres radiating from either end and vanishing in its body, or intercrossing with each other.

The first, or œsophageal superficial layer is consti-

tuted by the continuation of the longitudinal fibres of the œsophagus, which are spread out, radiating on the left part of the stomach. They form a thin layer, and gradually disappear on the left edge of that viscus, and on a level with its great tuberosity, but they are more numerous and close on the two surfaces of the cardiac portion, and are perpendicular to the axis of the stomach; near the great curve they bury themselves under the subjacent layer, crossing the direction of their fibres, while at the minor curvature these œsophageal fibres collect into a ribbon shape, and assume the disposition commonly called the *Swiss cravat*. The second superficial or pyloric layer, not noticed by anatomists, is formed from the continuation of the longitudinal fibres of the duodenum; from the pyloric ring which they surround they pass on both surfaces of the viscus parallel to its great axis, and are consequently perpendicular to the œsophageal fibres. They form a band along the great curve, analogous to, but not so thick as that on the minor curve. They terminate by interdigitating with the parabolic fibres, which will be described next.

The two deep-seated layers are, the parabolic fibres of the cardiac portion of the stomach, and which seem to be a continuation of the circular fibres of the œsophagus, and the circular fibres continued from those of the duodenum. The upper parabolic fibres pass obliquely upwards and to the right to surround the œsophageal orifice; the middle ones, enveloping the great tuberosity, pass horizontally from left to right, and the inferior ones, passing rather obliquely from above downwards, surround the fundus of the great cul-de-sac, the fibres forming not merely parabola, but absolute rings encircling the fundus, the diameter gradually decreasing until they reach the top. The circular pyloric fibres surround the stomach in the region extending from the pylorus to the cardia; they are thickest near the pylorus, where they form a true sphincter. Haller has observed that these fibres are not all circular, for many of them, instead of forming perfect rings, surround the hollow viscus like a girdle, the two ends of which cross without being united, and are lost among the neighbouring fibres. They are perpendicular to the parabolic.

As a resumé, in the left or cardiac portion of the stomach, the superficial fibres are perpendicular to the great axis of this viscus; the deeper-seated are parallel; a precisely inverse disposition being observed in the right or pyloric portion. When the œsophageal fibres contract, the fundus of the great cul-de-sac is brought near the cardia, at the same time the band of the minor curvature diminishes the distance between the two orifices, an arrangement which M. de Mussy is of opinion must singularly favor vomiting; the longitudinal pyloric fibres and the band of the smaller curvature in causing the contraction of the viscus, the contraction in the direction of the diameter being owing to the circular fibres. The parabolic fibres, acting in the same direction, tend to efface the cavity of the great cul-de-sac, and to propel the food to the pyloric extremity, while the superior fibres embracing the œsophageal orifice assist the lower fibres of that tube to close it, and prevent the regurgitation of food.—*Gazette Medicale*, June, 1842.

APOTHECARIES' HALL.

Licentiates admitted Thursday, September 3, 1842.

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BOOKS RECEIVED.

Methodus Medendi, or the Description and Treatment of the Principal Diseases incident to the Human Frame. By Henry M'Cormac, M.D. London: Longman and Co., 1842. 8vo. pp. 574.

Observations on Ulcers of the Legs, &c. By Archibald Maxfield. London: Churchill, 1842. 8vo. pp. 80.

On the Diseases of the Bladder and Prostate Gland. By William Coulson. Third edition. London: Longman and Co., 1842. 8vo. pp. 274.

The Valvular Structure of the Heart, &c., being the third Warneford Prize Essay for 1841. By W. F. Clay.

Examinations for Honors at the Birmingham Royal School of Medicine. Session 1841-2.

Forty-sixth Report of the Friends' Retreat, near York, 1842.

An Essay on Diabetes. By H. Bell, D.M.P. Translated from the French by Alfred Markwick. London: 1842. 8vo. pp. 96.

On some Peculiarities in the Circulation of the Liver. By Alexander Shaw. (From London Med. Gazette).

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THE PRINCIPLES AND PRACTICE OF MEDICINE, by Dr. Goolden.

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MEDICAL JURISPRUDENCE, by Mr. Hutchings and Mr. Ancell.

BOTANY, by Dr. Sigmond.

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Professor of Forensic Medicine, King's College, London, and Physician to the King's College Hospital.

[*For the Provincial Medical Journal.*]

In the forthcoming Report of the King's College Hospital for the year 1841, forwarded for publication to the "Medical Gazette," I have briefly referred to a case of scarlatina, accompanied by an unusually low frequency of pulse. As the case seems to merit some attention, it is here stated more at length, and contrasted with two other cases occurring under circumstances favorable to the daily and regular observation and record of the pulse.

The case to which I have referred occurred in a lad, aged sixteen, who presented himself as an out-patient of the King's College Hospital. He was first seen on the day before the appearance of the eruption, laboring under the usual premonitory symptoms of a febrile affection, with the full, soft, and frequent pulse, which so generally ushers in this form of disease. His pulse was then 120 in the recumbent posture. On the following day the eruption made its appearance, and the pulse in the same posture was 116. On the second day, counting from the appearance of the eruption, the efflorescence had disappeared, but without leaving a single bad symptom behind it. The pulse, however, fell to 59, and, on the third and fourth days, to 55. It rose again on the sixth to 65, and on the seventh it was 102. As the boy felt quite well, he returned, though contrary to my advice, to his work, which was that of an errand boy, but presented himself, after the lapse of a week, to the hospital for admission, laboring under anasarca.

It is worthy of remark, that this low frequency of the pulse was not accompanied by a corresponding reduction in the number of the respirations, as will be seen from the following comparison:—First day, pulse 116, respirations 28; second day, pulse 59, respirations 26; third day, pulse 55, respirations 24, fourth day, pulse 55, respirations 22; fifth day, pulse 65, respirations 21½; sixth day, pulse 102, respirations 26. It is scarcely necessary to add, that both pulse and respiration were counted in the recumbent posture.

It may not be uninteresting to compare this exceptional case with one of more than average severity, where the convalescence was slow and gradual, and none of the sequelæ of the disease occurred. The patient was a lad, of about the same age as the foregoing, and of rather feeble constitution. He first felt ill at five, p.m., complaining of shivering and slight sore throat. As early as ten o'clock of the same evening the tonsils and soft palate were much swollen, and of a bright red color, and he swallowed with difficulty. At midnight the eruption had made its appearance over the entire body, and the inflammation of the throat was rapidly increasing. As many cases of scarlatina had about this time proved fatal, in consequence of the severe affection of the throat, the patient was ordered to swallow rough ice in large quantities, and candied ice was applied to the throat. The eruption was in no way checked by this treatment, and in spite of this local application of cold, the skin remained moist with perspiration. By the use of this simple remedy, with the occasional employment of saline aperients, the inflammation of the throat was promptly checked, and the patient recovered without a single bad symptom. The pulse was carefully counted in the recumbent posture on successive days, morning and evening, and was found to be as follows:—

	Morning.	Evening.
1st day	120	110
2nd day	108	122
3rd day	102	102
4th day	96	92
5th day	90	92
6th day	90	92
7th day	76	64
8th day	67	68
9th day	72 (sitting)	53
10th day	62	56
11th day	54	—
12th day	60	—
14th day	80	—
21st day	72	—
28th day	82	—

It is worthy of remark, that the lowest frequency of the pulse, 54, corresponded to the period of greatest debility, and that with returning strength the pulse gradually rose to 82, which is about its frequency in health. The effect of change of posture on this low frequency of pulse was very considerable, the number being, standing 104, sitting 57, lying 64, giving a difference between standing and lying of 50 beats; whilst the effect on the pulse of 82, which corresponded to complete convalescence and returning strength, was comparatively slight, the numbers being, standing 92, sitting 85, lying 82, giving a difference of only 10 beats. During the last five days the respirations were carefully counted in the recumbent posture, and were as follows, compared with the pulse:—Pulse 54, respirations 30; pulse 60, respirations 26; pulse 80, respirations 23; pulse 72, respirations 22; pulse 82, respirations 22.

I subjoin an equally careful series of observations on the pulse in the case of a boy, aged twelve, whose disease at the onset was less severe than in the fore-

going instance, but whose convalescence was tardy and imperfect. On the tenth day he was removed into the country, contrary to my advice, and, as I was subsequently informed, suffered very severely from the sequelæ of the disease.

	Noon.	Eight, p.m.
1st day of eruption	——	140
2nd ,,	130	128
3rd ,,	136	117
4th ,,	102	108
5th ,,	100	102
6th ,,	92	102
7th ,,	92	——
8th ,,	106	——
9th ,,	96	——

The respiration during the four first days was 24, though the pulse ranged from 140 to 102, the proportions which the pulse bore to the respiration being 1 to 5.83 and 1 to 4.26. It is worthy of remark that, whilst in the former case the pulse on the ninth day had fallen from 120 (the number on the first day) to 53, in this last case it was, on the same day, as high as 96.

The second case, as I believe, represents pretty faithfully the ordinary march of the pulse in febrile affections, which pass through their several stages without interruption from any unusual symptoms. The highest number is generally observed at the commencement of the attack, and in the case of the febrile exanthemata, in the period intervening between the first attack of illness and the appearance of the eruption. When the eruption is fully out upon the skin, the pulse begins to fall, and from that time continues to become less and less frequent, till the entire disappearance of the disease, and the commencement of convalescence. This point of time then is marked by the lowest frequency of the pulse, and each advance towards complete recovery and established strength is attended with an increase of frequency, until at length the pulse attains the number which is natural to it in health. This rule is illustrated by a case of convalescence from fever, which I have elsewhere * reported, in which the pulse in the recumbent posture was, on the seventeenth day, 41; on the nineteenth, 49; on the twenty-second, 60; on the twenty-fifth, 63; and on the twenty-ninth, 80. The patient was a lad, aged nineteen.

It is well worthy of remark that the respiration follows exactly an inverse order during convalescence. Thus, in the case now under consideration, whilst the pulse on successive days was 54, 60, 80, 72, and 82, the respirations were falling steadily from 30 to 26, from 26 to 23, and from 23 to 22. I believe this to be a general rule, that whilst the body is advancing from weakness to strength, the pulse rises and the respiration falls, and that the combination of an infrequent pulse with a frequent respiration is one of the signs of a state of debility.

The first case confirms the statement that mild cases of scarlatina are those which are most commonly followed by the sequelæ of the disease; and the third case illustrates a fact, equally well made out, that when the pulse maintains a high frequency during the early stage of the disease, a lingering illness and a tardy and unsatisfactory convalescence may be looked for. The first case, as far as my experience extends (and I happen to have seen an unusual number of cases of scarlatina both in hospital and private practice), stands alone. The low frequency of the pulse at so early a stage of the disease is certainly a most unusual symptom, and one which I shall not at present attempt to explain.

The treatment adopted in the second case ought not to pass without comment. At the time that I was called in to see this case, the scarlet fever was extremely prevalent, and had proved fatal in many instances. The danger lay in the violent inflammation of the throat, and I determined, should any threatening case occur in my own practice, to apply my remedies at once to that part. Accordingly, as this case, from the rapid progress of the symptoms, and the violent inflammation of the throat itself, was calculated to excite the most serious alarm, I ordered the patient to swallow as much rough ice as he could, and kept the throat externally cooled with iced water. The other remedies administered were of the most simple kind, and could not be supposed to bear any important part in bringing about the favorable result. That this local application of cold is not likely to produce any bad effect, by preventing the full development of the disease, is shown by the fact that the eruption ran its usual course, and that the skin remained moist during the whole time that the ice was being used. I may add, that about the same time that this case was under my care, I was called in consultation to see the only one of three sisters who recovered from the disease, and whose symptoms were to the full as threatening as those of the fatal cases. She completely recovered under the early employment of the same remedy. This is but one of many local applications of cold which I have found extremely efficacious in diseases in which such a remedy is not commonly employed. There is no doubt that cold, locally applied, is among the most certain and valuable remedies which we possess.

* Guy's Hospital Reports, No. 8, Diurnal Variations of the Pulse.

CASE OF TUMOR IN THE RECTUM TREATED BY LIGATURE.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—The following case of tumor in the rectum was read to the Association at Exeter on the 4th ult., and as many of the members appeared to be considerably interested by its recital, I shall feel obliged by your giving it further publicity through the medium of your widely circulated Journal.

Your obedient servant,

J. C. Jerrard.

Honiton, September 9, 1842.

Case.—Mr. Bishop, a respectable farmer, residing in the parish of Farway, near Honiton, applied to me in the beginning of August, 1841, under the following circumstances:—He had been suffering for about eighteen months from pain and a sense of weight in the region of the sacrum. During the latter half of the above-named period he was compelled to rise

from his bed, from ten to twenty times in a night, and his sufferings in the day time were equally severe, being never free from distressing tenesmus. At the time he applied to me he informed me that the evacuations were passed with great pain, and flattened like a piece of tape. His age is about sixty-five; constitution previously good.

August 11. I examined the rectum, and found a tumor occupying the lower portion of the gut. On passing the finger as far as it would go by the side of the tumor, it seemed to adhere by a pedicle about four or five inches up the bowel; it possessed a scirrhous hardness and a very uneven surface, and bled freely on the slightest touch. Ordered starch and laudanum injections once or twice daily, and the bowels to be kept open, if possible, by repeated doses of confectio sennæ and sulphur lotum.

16. The opiate injections have quieted the rectum. Ordered castor oil in half ounce doses every six hours.

17. Finding the oil had not operated, although it had been repeated several times, and had produced strong expulsive efforts, I proposed passing a ligature on the following day round the neck of the tumor, to which he assented. Ordered the oil to be continued. About the middle of the night I was sent for; on my arrival I found that, during repeated and violent strainings, the tumor had been forced out, and at the same time an enormous fæcal evacuation took place. The tumor presented the following appearances:—Its bulk was about the size of an ordinary man's fist; its foot stalk about two inches in diameter; its surface ulcerated in several parts, rather deeply; its color was a dark red. I passed a piece of tape round it, and drew it tight; it occasioned great pain. I gave my patient about a desertspoonful of tincture of opium, and a suppository, containing three grains of opium, was passed up the rectum by the side of the stalk of the tumor.

18. Saw him in the afternoon. He says his pain entirely subsided in two hours after the opiates were administered. Tumor black.

19. Has had a good night. Applied another ligature and suppository. Complains much of the ligature.

20. Says the pain occasioned by the ligature soon passed off, and he is now comfortable.

21. Since my last visit the bowels have been moved several times, and there has been some hiccup; no tenderness or tension of the abdomen, nor pain in or about the rectum. I applied another ligature, which produced severe pain, as before; gave an aperient draught with rhubarb, and ordered a suppository to be applied if the pain from the ligature should continue after the operation of the draught.

22. The draught has operated well, leaving the bowels settled; the suppository has not been required. The tumor is much shrunk, and decomposition is going on. Ordered a suppository to be used any time when in pain. There is a good deal of excoriation of the nates occasioned by the close contact of the tumor. Interposed some lint spread with chalk ointment. Pulse 70; going on well.

N.B.—The pulse has been at about 70 every day since the ligatures were first applied.

23. The bowels acted to day. On drawing down the tumor, I perceived the ligatures to be slack, and applied another as tight as it could be drawn; it gave pain. A suppository was applied immediately.

24. The pain occasioned by the last ligature soon went off.

25. This day the tumor, on being gently drawn, came off; the bowels have acted to day freely and without any pain.

26. Is up and out of doors.

29. To day is free from pain, except a little external soreness when he sits down; there is a little purulent discharge from the anus; the bowels have been moved; the stools are deficient of bile. Ordered a blue pill two or three times a week and castor oil the following mornings.

September 1. The motions are sufficiently tinged with bile.

REMARKS.

1. The man has been perfectly well ever since, upwards of a year having elapsed since the performance of the operation.

2. The case appeared to be a hopeless one, inasmuch as the tumor could not have been removed by any cutting operation, with any prospect of success.

3. The successful termination of this case appears to be mainly, if not entirely, owing to the influence of the repeated doses of opium obviating the mischief which it seems to me more than probable would have resulted from the application of ligatures to so bulky a part and in such a situation.

A BLEEDING FAMILY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—The following account of hæmorrhagic diathesis existing in a whole family will probably prove interesting to many of your readers. It shows, I think, the great care which it is necessary to observe in the treatment of many of the diseases of such a family, or in the performance of any operation where such a predisposition is known; as even a mere leech bite may endanger life. I need not, however, dilate on the practical deductions to be obtained from a knowledge of such a circumstance where it exists, as they must necessarily be almost self evident. I was led to make this communication from seeing one somewhat similar, but less striking, in the last Number of the "Provincial Journal," or otherwise I should have probably let it rest amongst the half forgotten facts which have been observed and then passed by amidst the distracting cares of general practice.

Mrs. W. Martin, up to the period of the birth of her first child, was a remarkably fine, handsome, and healthy young woman; had scarcely ever had any ailment requiring medical care. At the birth of her first child she had a severe and dangerous flooding, which, in spite of every means taken to prevent it, has recurred at each succeeding birth. For the first five children I attended her myself, but in her last and sixth confinement she was attended by my friend, Mr. Morey, on my account, about a year ago, when the flooding was so excessive that her life was for some time despaired of, and she has been ever since a mere shade of the woman she formerly was—being now pale, thin, attenuated, and feeble.

Her first child, a boy, bled at the chord soon after it was tied; it was carefully tied again several times in various ways; styptics were also assiduously applied, but the child died.

The second child, a girl, also bled at the chord soon after birth; the ligature was reapplied several times ere the bleeding stopped, which did not take place until the end of several days. When about five years old this girl was struck on the head with a piece of wood; a small wound, not larger than a pin's point, was produced, which bled continuously for many days, and the hæmorrhage could not be arrested in spite of all the means that the ingenuity of my friend, Dr. Scholfield, or myself could exert, until the child was brought to the most extreme state of debility, and then a rather large slough had been formed by the various styptics applied; the slough, however, came away and the wound healed without further hæmorrhage. This child has been subject since she was about a year old to a number of extensive ecchymoses, which form in the cellular texture under the skin all over the body, from the size of the palm of the hand to that of the disc of a bean, and which gradually disperse; they are accompanied by a feeling of soreness; they come on without injury, and are seldom absent.

The third child, a girl, did not bleed until the navel string had been separated upwards of a week, when she bled from the navel, and continued to do so for some time; the bleeding was arrested by the tinct. ferri muriat. on lint, under strips of plaster and constant pressure. She had hæmorrhage from the bowels when about three years old, and is now subject to the same ecchymoses as the elder sister, in precisely the same form.

The fourth child, a girl, bled at the navel; at the end of a fortnight it separated, as the last, without bleeding; the hæmorrhage was checked in this case as in the last; she was becoming the subject of the same ecchymoses, but died of scarlatina about a year ago.

The fifth, a boy, did not bleed until the end of three weeks; the hæmorrhage was equally difficult to stop; he afterwards became a fine boy, and died of inflammation of the lungs about a year ago; I believe death was hastened by the hæmorrhage which took place from a leech bite.

The sixth child, a girl, did not bleed from the navel, and has as yet shown no hæmorrhagic disposition. The whole of the children now living are healthy-looking, and well developed in frame for their respective ages, and have so far had but little illness.

Yours faithfully,

Robert Storrs.

Doncaster, September 8, 1842.

CASE
OF
TRAUMATIC GANGRENE,
SUCCESSFULLY TREATED BY
THE LOCAL APPLICATION OF ACETIC ACID.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen, — Should you deem the following cases of sufficient interest for publication, I beg you will give them an early insertion in the "Provincial Medical Journal."

Yours obediently,

John Wickens West, Surgeon.

Poole, September 12, 1842.

William Hatchard, aged seventy, by occupation a sailor, of a feeble constitution, rendered so particularly by several attacks of hemiplegia of the right side, applied to me on Thursday, October 10, 1841, in consequence of having met with a severe injury to his right leg, from being knocked down by the near leader of a coach whilst he was crossing the street.

I found, on examination, a considerable wound on the external malleolus of the right leg, but there was no fracture either of the tibia or fibula. On the left foot, near the internal malleolus, there was likewise a small wound.

I immediately dressed the parts with adhesive plaster and a bandage, desiring that, should swelling occur, an evaporating lotion should be applied.

11. Complains this morning of acute pain in the wound and middle of the right leg. Has feverish symptoms; white tongue; pulse 95; bowels not open. I ordered him a senna draught to be taken immediately. To continue the lotion.

12. The foot and leg much swollen and exceedingly painful. I removed the dressings, and the wound on the right leg presented a very unhealthy aspect, with a disposition to slough. The calf was of a slightly livid color; pulse 85; countenance anxious, and he appears much depressed.

Camphor mixture, one ounce;
Compound spirits spirits of ammonia, half a drachm,
Every four hours.
Linseed meal poultice to the wounds.

13. Delirious during the night; pain in the leg and foot acute; vesications on the foot and the lividity on the leg increased; the wound sloughing; pulse 110. intermittent.

I applied the strong acetic acid to the livid parts, and desired the ammonia draught and poultice to be continued.

14. The slough has separated from the wounds, and the lividity has not increased since yesterday. The calf of the left leg is also livid, and there are vesications in various parts of it. To continue the draught and applications as yesterday.

15. Has been perfectly sensible and composed since the night of the 13th, and feels better and stronger this morning. The sloughs have separated, and the wounds are looking healthy. The lividity not increased; pulse 108; bowels open; tongue dry. Ordered port wine, two ounces daily. To continue as before.

17. Since last report has been going on favorably. The gangrene has not extended. The wounds look favorable, and discharge healthy pus; the lividity has nearly disappeared; pulse 80; tongue moist. To discontinue the acetic acid, and wounds to be dressed with soap plaster.

Sulphate of quinine, half a grain;
Diluted sulphuric acid, ten drops;
Compound tincture of cardamoms, half a drachm;
Water, one ounce. Three times a day.

21. Continues to improve daily, the wounds healing.

November 10. Since the last report his health has been improving, but the wounds heal slowly.

It will be sufficient to add that the patient continued to improve, and eventually entirely recovered. The joint became anchylosed, which disabled him from walking without support.

PROFUSE HÆMORRHAGE FROM A SMALL VARICOSE ULCER ON THE LEG.

Mary Ann Baker, aged 36, by occupation a mangler, has been laboring under, for the last twelve-month, enormous varicose veins of both legs, which were at times exceedingly painful and tender. On the lower part of the right leg was situated a small ulcer, which would not heal. She was induced to apply a variety of remedies from time to time, but nothing gave her anything like permanent relief. She was accustomed to use a bandage, and on Saturday applied it rather tighter than usual. Just after she had adjusted it, as she was retiring to rest, she was attacked with a profuse hæmorrhage which appeared to issue from the lower part of the leg, near the wound. She called for her mother, who immediately ran for my assistance, and fortunately, finding me at home, I went immediately to her house, and found her in her bed-room, lying on the floor, in a state of extreme syncope, and bleeding profusely. The floor was literally covered with blood. I instantly removed the bandage, which I found exceedingly tight on the centre of the leg, and discovered that the blood issued from the wound, which was not larger than a shilling. I introduced lunar caustic pretty freely and a pledget of lint over it, which controlled the hæmorrhage. In the course of an hour she revived, but complained of great pain in the wound.

The dressings were allowed to remain for several days, when they were removed, and the wound looked inclined to slough. I ordered a carrot poultice, which soon separated the slough, and the wound, with common applications, healed rapidly.—J. W. W.

OBSERVATIONS ON HYPERTROPHY OF THE BRAIN IN CHILDREN.

By Cathcart Lees, M.B.,
Physician to the South Dublin Union, and to the Institution for the Diseases of Children.

Although the much greater development of the brain in some cases than in others, as well as its apparent disproportion to its osseous envelope, has been occasionally noticed by pathologists, as Morgagni, who observes, "that in some bodies which he had examined, the brain appeared large for the cranium which enclosed it, and on this account seemed to be compressed;" yet, it is only within the last few years that the attention of the profession has been directed to this subject, or any inquiry made, as to whether this condition might not be ranked as a peculiar abnormal state, manifested by certain lesions of functions, and presenting a group of special symptoms. The facts hitherto adduced have been such as, I consider, would tend rather to excite inquiry, than satisfy conviction, as to its existence, particularly when we find such pathologists as Rostan (to whom science is so much indebted for his researches on the pathology of the brain) classing it as a doubtful state; for without denying its possibility, he evidently considers that it is rather a consecutive state, depending on encephalitis. Bouillaud entertained the same opinion, as we may infer from the subjoined passage of Andral:—"Est-ce là un premier degré d'encephalite, ainsi que le pense M. Bouillaud, qui a publié sur ce sujet d'interessantes observations. Mais pourquoi, dans cette hypothese, la substance nerveuse augmentée de consistance, est-elle en même temps décoloreé? une imflammation, ne devrait-elle pas produire l'effet contraire?"*

Dance and Andral, who have given the best description of hypertrophy of the brain, assign to it peculiar anatomical characters,† and dwell particularly on the necessity of distinguishing this state from that of hyperæmia, as it is found to be most frequently in a contrary state, as evinced by its paleness. Their observations, however, refer almost exclusively to adult life, and Dance even appears to consider the age of puberty as a predisposing cause to this state.

In the same chapter, Andral mentions that Laennec had observed this state of the brain as occurring in cases which presented the symptoms of hydrocephalus, and in whom there was but very little effusion; but there was a compressed state of the brain, which he regarded as depending on too active a nutrition. There are not, however, any points of diagnosis laid down to serve to discriminate this state from chronic hydrocephalus, the disease with which it is most likely to be confounded, and which entitles it to the serious consideration of all those who are occupied with the study of infantile diseases, and which induces me to bring forward some cases which have occurred among the children of the institution to which I am attached, and which I trust may assist in establishing certain data to found future observations on, as with the exception of Dr. Munchmeyer,‡ of Lunebourg, this peculiar state (as occurring in children) does not appear to have met with the attention which it merits.§ In some cases reported by Dr. Sims in the Transactions of the Medico-Chirurgical Society, the histories are so imperfectly given that it is impossible to ascertain whether the hypertrophy was the original disease, or merely a consequence of the inflammatory conditions with which, after death, it was found to be coincident. Thus in his first case, that of a girl, aged sixteen, he states that she was subject to some kind of fits to the age of seven years; that she had no paralysis, but a weakness of her limbs, and she died of enteritis, having presented no cerebral symptoms during her last illness.

In another case, that of a child eleven months old, no previous history is given till three days before

* Clinique Medical, vol. v.

† Precis d'Anatomie, vol. ii., p. 775.

‡ Schmidt's Jahrbucher, vol. xxv., 1840.

§ Cruveilhier in his article on Hypertrophy, in the Dictionnaire de Medicine, states, that M. Jadelot had observed, that in many infants who died with the symptoms of hydrocephalus, he had found great disproportion between the brain and the cranium. He merely mentions that the symptoms are those of compression, without making any attempt at diagnosis.

death, when the child was attacked with the symptoms of acute hydrocephalus, and died, when he states that from the soft state of the brain it is probable that an inflammatory process had been going on during the latter period of the child's life. There is no accurate history given of any of the other cases, or any data laid down on which to found any principle of diagnosis. The cases which have occurred in my own practice are three, and although they differ in some points, yet as they all tend to illustrate the important features of this peculiar state, with regard to diagnosis, I shall give each of them in detail.

Case I.—John Harding, aged two years, a full, heavy-looking child, was admitted into the hospital in May, 1842, for pertussis; his mother states that he has always been healthy, but very *heavy* and *drowsy*, not playful like her other children; his appetite has always been *great*. The head is rather larger than it ought to be in proportion to his age, particularly across the parietal protuberances, which form considerable projections; the frontal bone also projects over the root of the nose; fontanelles perfectly ossified; his eyes are large, prominent, and widely set; the intelligence is perfect, but he appears to be very *apathetic*, and does not mind any object attentively but his food, for which he is very greedy; he is easily made to cry; there was no fever on him, but the paroxysms of the cough were very violent, and frequently succeeded by convulsions, which were general, and in one of which he died on the sixth day of his disease.

On removing the calvarium, the dura mater appeared to be tense, and on dividing it, the cerebrum appeared swollen, and protruded through the membranes; the convolutions appeared to be flattened as if compressed; the vessels of the pia mater were injected with very red blood; the substance of the brain was much congested, but of a firm consistence and very large; there was no serous effusion into the ventricles; there was a slight vascularity of bronchial mucous membrane; the bronchial glands were not enlarged; the larynx was perfectly healthy; there were a very few dark, firm spots, like the dots in pulmonary apoplexy, scattered through the lungs, and quite isolated; all the nerves were carefully dissected, and presented nothing abnormal.

Case II.—Ann Murphy, aged three, a very delicate-looking child, with the head large in proportion to the body, which is emaciated, particularly the lower extremities; the abdomen is tumid; there is considerable projection of the frontal bone, as also of the posterior angles of both parietal bones; the eyes are heavy, and widely set, so as to give the child the face of one with chronic hydrocephalus; the fontanelles are quite closed and firm, but cartilaginous; she is very cross and greedy, crying whenever she sees food, till she gets it, when she falls asleep over it; in fact she spends her time in crying, eating, and sleeping. Her intellect is obtuse, but appears to be perfect; the pulse was generally regular, and her pupils natural. She had been left at the gate of the hospital, so we did not know her previous history, but she remained some months under my observation previous to her death, which took place gradually from chronic diarrhœa, without convulsions.

The brain weighed two pounds three ounces; the dura mater was firmly adherent to the cranium; the brain was large, the dura mater being rather tense over it; the substance of the brain was firmer than is natural in a child of that age, and also of a paler appearance; there was not any fluid in the ventricles nor at the base of the brain; in fact, it appeared to be nearly void of either blood or serum; there were not any tubercles in either the lungs or abdomen.*

Case III.—Mary L., aged seven, light brown hair, delicate skin, appears as if she is always dropping asleep; her pupils are natural; pulse regular; her functions are well performed; her temper is very bad; she will not learn her lessons, but this appears to depend more upon indolence than stupidity; her appetite is very great; her head is not too large in proportion to her body, but there is considerable projection across the parietal protuberances; she complains frequently of headache, and sometimes vomits in the morning. I was consulted on July 10, 1842, for a strumous swelling in the neck of this child, and was so struck by her appearance, that I inquired particularly into her history.

I have placed these cases in apposition, in order that we may compare them with regard to their early symptoms, as I think they are chiefly valuable from their accurate previous history, for in none of the cases which have been hitherto published, has there been any stress laid on this point, which, however, is of paramount importance. In the cases related by Andral, headache, convulsions, and epilepsy, appear to have occurred, but they only came under his observation in the second, or acute stage of this state, when the brain was suffering from compression, as in his cases the dimensions of the cranium were not larger than natural, which must cause a great difference in the symptoms. Thus idiotcy, which depends so frequently on atrophy of the brain, may be caused by hypertrophy, if there be much compression, whereas, if the cranium be developed in the same ratio with the brain, there are often no symptoms produced, or but slight ones, as in a case related by M. Scoutteten,† where a child of five years old was affected with hypertrophy of the brain (with enlargement of the skull) to such a degree, that the head became as large as that of an adult, particularly prominent at the occipital protuberances; the cerebral functions were undisturbed, and the only phenomena which the child presented during life were the frequent fallings occasioned by the weight of the head, which was carried forward whenever the child wished to run, and a great tendency to sleep when he remained quiet. He died of acute enteritis, and the brain exhibited a great development of all its parts, with only a small quantity of reddish serum in the ventricles.

* It is very difficult to ascertain with any degree of accuracy, the average weight of the healthy brain at different periods of life, and still more, the weight of it in various diseases, as it must be always open to a source of fallacy, resulting from other causes, as the amount of congestion, fluid, and the results of disease; thus, Dr. Sims has given a table containing the weight of 253 brains in different diseases, and then states that the weight of the brain cannot be fixed by any means, however accurate, which is further proved by several cases given by him, in which the brain was found unusually large and heavy from various causes, but which did not constitute hypertrophy.

† Archives Generales, vol. vii.

Let us now classify the symptoms which the above cases presented, and see how far they may assist us in establishing a diagnosis.

First, with regard to intelligence.

There was a peculiar *obtuseness of intellect*, characterised chiefly by *apathy* to external objects, and a great tendency to drowsiness. There also was evinced a *peculiar irritability* of temper.

Andral states, that in adults, headache, with severe exacerbations, is a prominent symptom; this also occurred in the last case detailed by me. He also mentions weakness of the limbs, often ending in paralysis, convulsion, epilepsy; but these symptoms belong to the second period of this state, when it has passed into the acute stage; but as it is an essential feature of every hypertrophy to develop itself slowly, I have only had an opportunity of studying this state in the first or chronic period, as the two first children died of other diseases before they had reached the second period, which most probably would occur about the second dentition; thus in observation 4th of Andral, the boy became epileptic at the age of seven years, and died comatose, after a fit, at nine years old.

The *appetite was very great* in all the cases which I have noted, and there existed the *peculiar projection of the parietal protuberances*, on which Dr. Munchmeyer particularly insists, and which, I think, may prove a valuable guide in aiding to discriminate this state from chronic hydrocephalus, with which disease it is most frequently confounded. Thus, in the first case related by Dr. Sims, the mother of the child informed him that they had wished to tap the head at one of the hospitals. And Dr. Hennis Green,* in an excellent article on this subject, states that he recently had seen a child who had been condemned to death by a medical man, as having water on the brain, but which was a case of simple hypertrophy, and which did not interfere with the health of the child. The diagnostic sign which he gives, is the sensation of firmness communicated to the finger, on pressure being made over the fontanelles, in cases of hypertrophy, as contrasted with the fluctuating feel in cases of chronic hydrocephalus; but this could not apply in cases of very young children, or in extreme cases.

The prognosis in children is not necessarily unfavorable, for as it is rather an error of development than an actual disease, there is a natural tendency to return to the normal state; the chief danger, in fact, arising from the occurrence of other diseases, as those attendant on dentition, the exanthemata. It is probable that the rapid and sudden deaths which occasionally take place in the malignant forms of scarlatina (some of which I have myself witnessed when the throat has been but slightly affected, and when they die in a very early stage with cerebral symptoms, as if poisoned by the virulence of the disease), may be the result of a state of hyperæmia, superadded to this peculiar state of hypertrophy of the brain. I merely hint at this, from having found myself quite unable to explain the cause of death by the *post mortem* appearances in some of those cases which I have unfortunately met with, and which appear to set all treatment at defiance. The causes of this state are very obscure, but are probably dependant on, or connected with struma; and although the observations which have been hitherto published with regard to this state, bear reference to it as chiefly occurring in adult life, yet, I think, we must regard it as the result either of an abnormal development of the brain, excited before birth, or depending on primary organisation. For as Tiedeman and Valentine have established that the fœtal brain is one of the heaviest and most vascular organs of the body, but presenting little trace of organisation, the primitive type may continue for some years, and thus give rise to hypertrophy, which may remain for a considerable time without interfering with the general health (as we see occurring in other organs, the liver for instance), unless there be either an increase of intensity in its action, or some acute disease supervenes. Thus bearing out the general law of hypertrophy, when existing in other organs, and which is its peculiar feature—viz., that the functional disorders which it entails only extend beyond the affected part, according as the part itself extends its sphere of action, thus differing from other organic lesions which so soon affect the whole economy, wherever may be the seat of the disease.—*Dublin Journal*, September, 1842.

* Provincial Medical and Surgical Journal.

THE THEORY OF RESPIRATION.

By Justus Liebig, M.D.

During the passage of the venous blood through the lungs, the globules change their color; and with this change of color, oxygen is absorbed from the atmosphere. Further, for every volume of oxygen absorbed, an equal volume of carbonic acid is, in most cases, given out.

The red globules contain a *compound of iron;* and no other constituent of the body contains iron.

Whatever change the other constituents of the blood undergo in the lungs, thus much is certain, that the globules of venous blood experience a change of color, and that this change depends on the action of oxygen.

Now we observe that the globules of arterial blood retain their color in the larger vessels, and lose it only during their passage through the capillaries. All those constituents of venous blood, which are capable of combining with oxygen, take up a corresponding quantity of it in the lungs. Experiments made with arterial serum have shown, that when in contact with oxygen it does not diminish the volume of that gas. Venous blood, in contact with oxygen, is reddened, while oxygen is absorbed; and a corresponding quantity of carbonic acid is formed.

It is evident that the change of color in the venous globules depends on the combination of some one of their elements with oxygen; and that this absorption of oxygen is attended with the separation of a certain quantity of carbonic acid gas.

This carbonic acid is not separated from the serum; for the serum does not possess the property, when in contact with oxygen, of giving off carbonic acid. On the contrary, when separated from the globules, it absorbs from half its volume to an equal volume of carbonic acid, and, at ordinary temperatures, is not saturated with that gas. (See the article "Blut" in the "Handwörterbuch der Chemie von Poggendorff, Wöhler, and Liebig, p. 877.)

Arterial blood, when drawn from the body, is soon altered; its florid color becomes dark red. The florid blood, which owes its color to the globules, becomes dark by the action of carbonic acid, and this change of color affects the globules, for florid blood absorbs a number of gases which do not dissolve in the fluid part of the blood when separated from the globules. *It is evident, therefore, that the globules have the power of combining with gases.*

The globules of the blood change their color in different gases; and this change may be owing either to a combination or to a decomposition.

Sulphuretted hydrogen turns them blackish green and finally black; and the original red color cannot, in this case, be restored by contact with oxygen. Here a decomposition has obviously taken place.

The globules darkened by carbonic acid become again florid in oxygen, with disengagement of carbonic acid. The same thing takes place in nitrous oxide. It is clear that they have here undergone no decomposition, and, consequently, they possess the power of combining with gases, *while the compound they form with carbonic acid is destroyed by oxygen.* When left to themselves, out of the body, the compound formed with oxygen again becomes dark, but does not recover its florid color a second time by the action of oxygen.

The globules of the blood contain a compound of iron. From the never-failing presence of iron in red blood, we must conclude, that it is unquestionably necessary to animal life; and, since physiology has proved, that the globules take no share in the process of nutrition, it cannot be doubted that they play a part in the process of respiration.

The compound of iron in the globules has the characters of an oxidised compound; for it is decomposed by sulphuretted hydrogen, exactly in the same way as the oxides or other analogous compounds of iron. By means of diluted mineral acids, peroxide (sesquioxide) of iron may be extracted, at the ordinary temperature, from the fresh or dried red coloring matter of the blood.

The characters of the compounds of iron may, perhaps, assist us to explain the share which that metal takes in the respiratory process. No other metal can be compared with iron, for the remarkable properties of its compounds.

The compounds of protoxide of iron possess the property of depriving other oxidised compounds of oxygen; while the compounds of peroxide of iron, under other circumstances, give up oxygen with the utmost facility.

Hydrated peroxide of iron, in contact with organic matters destitute of sulphur, is converted into carbonate of the protoxide.

Carbonate of protoxide of iron, in contact with water and oxygen, is decomposed; all the carbonic acid is given off, and, by absorption of oxygen, it passes into the hydrated peroxide, which may again be converted into a compound of the protoxide.

Not only the oxides of iron, but also the cyanides of that metal, exhibit similar properties. Prussian blue contains iron in combination with all the organic elements of the body; hydrogen and oxygen (water), carbon and nitrogen (cyanogen).

When it is exposed to light, cyanogen is given off, and it becomes white; in the dark it attracts oxygen, and recovers its blue color.

All these observations, taken together, lead to the opinion that the globules of arterial blood contain a compound of iron saturated with oxygen, which, in the living blood, loses its oxygen during its passage through the capillaries. The same thing occurs when it is separated from the body, and begins to undergo decomposition (to putrefy). The compound, rich in oxygen, passes, therefore, by the loss of oxygen (reduction), into one far less charged with that element. One of the products of oxidation formed in this process is carbonic acid. The compound of iron in the venous blood possesses the property of combining with carbonic acid; and it is obvious that the globules of the arterial blood, after losing a part of their oxygen, will, if they meet with carbonic acid, combine with that substance.

When they reach the lungs, they will again take up the oxygen they have lost; for every volume of oxygen absorbed, a corresponding volume of carbonic acid will be separated; they will return to their former state—that is, they will again acquire the power of giving off oxygen.

For every volume of oxygen which the globules can give off, there will be formed (as carbonic acid contains its own volume of oxygen, without condensation) neither more nor less than an equal volume of carbonic acid. For every volume of oxygen which the globules are capable of absorbing, no more carbonic acid can possibly be separated than that volume of oxygen can produce.

When carbonate of protoxide of iron, by the absorption of oxygen, passes into the hydrated peroxide, there are given off, for every volume of oxygen necessary to the change from protoxide to peroxide, four volumes of carbonic acid gas.

But from one volume of oxygen only one volume of carbonic acid can be *produced;* and the absorption of one volume of oxygen can only cause, directly, the *separation* of an equal volume of carbonic acid. Consequently, the substance or compound which has lost its oxygen, during the passage of arterial into venous blood, must have been capable of absorbing or combining with carbonic acid; and we find, in point of fact, that the living blood is never, in any state, saturated with carbonic acid; that it is capable of taking up an additional quantity, without any apparent disturbance of the function of the globules. Thus, for example, after drinking effervescing wines, beer, or mineral waters, more carbonic acid must necessarily be expired than at other times. In all cases, where the oxygen of the arterial globules has been partly expended, otherwise than in the formation of carbonic acid, the amount of this latter gas expired will correspond exactly with that which has been formed; less, however, will be given out after the use of fat and of still wines, than after champagne.

According to the views now developed, the globules of arterial blood, in their passage through the capillaries, yield oxygen to certain constituents of the body. A small portion of this oxygen serves to produce the change of matter, and determines the separation of living parts and their conversion into lifeless compounds, as well as the formation of the secretions and excretions. The greater part, however, of the oxygen

is employed in converting into oxidised compounds the newly-formed substances, which no longer form part of the living tissues.

In their return towards the heart, the globules which have lost their oxygen combine with carbonic acid, producing venous blood; and, when they reach the lungs, an exchange takes place between this carbonic acid and the oxygen of the atmosphere.

The organic compound of iron, which exists in venous blood, recovers in the lungs the oxygen it has lost, and, in consequence of this absorption of oxygen, the carbonic acid in combination with it is separated.

All the compounds present in venous blood, which have an attraction for oxygen, are converted, in the lungs, like the globules, into more highly oxidised compounds; a certain amount of carbonic acid is formed, of which a part always remains dissolved in the serum of the blood.

The quantity of carbonic acid dissolved, or of that combined with soda, must be equal in venous and arterial blood, since both have the same temperature; but arterial blood, when drawn, must, after a short time, contain a larger quantity of carbonic acid than venous blood, because the oxygen of the globules is expended in producing that compound.

Hence, in the animal organism, two processes of oxidation are going on; one in the lungs, the other in the capillaries. By means of the former, in spite of the degree of cooling, and of the increased evaporation which takes place there, the constant temperature of the lungs is kept up; while the heat of the rest of the body is supplied by the latter.

A man, who expires daily 13·9 oz. of carbon, in the form of carbonic acid, consumes, in 24 hours, 37 oz. of oxygen, which occupy a space equal to 807 litres = 51,648 cubic inches (Hessian).

If we reckon 18 respirations to a minute, we have, in 24 hours, 25,920 respirations; and, consequently, in each respiration, there are taken into the blood $\frac{51648}{25920} = 1{\cdot}99$ cubic inch of oxygen.

In one minute, therefore, there are added to the constituents of the blood × 18 1·99 = 35·8 cubic inches of oxygen, which, at the ordinary temperature, weigh rather less that 12 grains.

If we now assume, that in one minute 10 lbs. of blood pass through the lungs (Müller, Physiologie, vol. i, p. 345), and that this quantity of blood measures 320 cubic inches, then 1 cubic inch of oxygen unites with 9 cubic inches of blood, very nearly.

According to the researches of Dènis, Richardson, and Nasse (Handwörterbuch der Physiologie, vol. i. p. 138), 10,000 parts of blood contain 8 parts of peroxide of iron. Consequently, 76,800 grains (10 lbs. Hessian) of blood contain 61·54 grains of peroxide of iron in arterial blood, = 55·14 of protoxide in venous blood.

Let us now assume that the iron of the globules of venous blood is in the state of protoxide. It follows, that 55·14 grains of protoxide of iron, in passing through the lungs, take up, in one minute, 6·40 grains of oxygen (the quantity necessary to convert it into peroxide). But since, in the same time, the 10 lbs. of blood have taken up 12 grains of oxygen, there remain 5.60 grains of oxygen, which combine with the other constituents of the blood.

Now, 55·14 grains of protoxide of iron combine with 34·8 grains of carbonic acid, which occupy the volume of 73 cubic inches. It is, obvious, therefore, that the amount of iron present in the blood, if in the state of protoxide, is sufficient to furnish the means of carrying or transporting twice as much carbonic acid as can possibly be formed by the oxygen absorbed in the lungs.

The hypothesis just developed rests on well-known observations, and, indeed, explains completely the process of respiration, as far as it depends on the globules of the blood. It does not exclude the opinion that carbonic acid may reach the lungs in other ways; that certain other constituents of the blood may give rise to the formation of carbonic acid in the lungs. But all this has no connection with that vital process by which the heat necessary for the support of life is generated in every part of the body. Now it is this alone which, for the present, can be considered as the object truly worthy of investigation. It is not, indeed, uninteresting to inquire, why dark blood becomes florid by the action of nitre, common salt, &c.; but this question has no relation to the natural respiratory process.

The frightful effects of sulphuretted hydrogen, and of prussic acid, which, when inspired, put a stop to all the phenomena of motion in a few seconds, are explained in a natural manner by the well-known action of these compounds on those of iron, when alkalies are present; and free alkali is never absent in the blood.

Let us suppose that the globules lose their property of absorbing oxygen, and of afterwards giving up this oxygen and carrying off the resulting carbonic acid; such a hypothetical state of disease must instantly become perceptible in the temperature and other vital phenomena of the body. The change of matter will be arrested, while yet the vital motions will not be instantly stopped.

The conductors of force, the nerves, will convey, as before, to the heart and intestines the power necessary for their functions. This power they will receive from the muscular system, while, as no change of matter takes place in the latter, the supply must soon fail. As no change of matter occurs, no lifeless compounds are separated, neither bile nor urine can be formed; and the temperature of the body must sink.

This state of matters soon puts a stop to the process of nutrition, and, sooner or later, death must follow, but unaccompanied by febrile symptoms, which, in this case, is a very important fact.

This example has been selected in order to show the importance and probable advantage of an examination of the blood in analogous diseased conditions. It cannot be, in the slightest degree, doubtful that the function ascribed to the blood globules may be considered as fully explained and cleared up, if in such morbid conditions, we shall discover a change in their form, structure, or chemical characters—a change which must be recognisable by the use of appropriate reagents.

If we consider the force which determines the vital phenomena as a property of certain substances, this view leads of itself to a new and more rigorous consideration of certain singular phenomena, which these

very substances exhibit, in circumstances in which they no longer make a part of living organisms.—*From Liebig's Animal Chemistry.*

PROVINCIAL MEDICAL JOURNAL

SATURDAY, SEPTEMBER 17, 1842.

On the 2nd of September, at two o'clock, an inquest was held at the Elephant and Castle, Camden Town, on the bodies of two of four boys who had been exposed during several hours of the night to the gases escaping from a lime-kiln in that neighbourhood. This inquiry, and the melancholy accident itself, we shall briefly notice.

The four boys had been found lying in a group upon the kiln, near the opening through which the gases escaped, "the kiln had been left burning over night," and there was every reason for supposing the boys had not approached it until a pretty late hour on the preceding evening. Carrol and Burke (to use the words of the "Times") "were quite dead, both apparently from suffocation; the latter also was much burnt about the arms and legs." The others lay in a state of coma, occasionally interrupted by convulsions, and were removed to University College Hospital, where one shortly afterwards died. We shall at present confine ourselves to the cases of Carrol and Burke, as the report of the inquest on the body of him who died in hospital has not as yet reached us.

It appears, from the account which the "Times" gives of the accident and inquest, that the bodies of Burke and Carrol, being found deprived of circulation and respiration, were looked upon as quite beyond recovery, and no effort whatever was made to restore them to life. Now this was unquestionably a most unfortunate blunder, one which shows clearly, how dangerous it is that a practitioner should take the responsibility of cases, of such rare occurrence in this country, without availing himself of the advice of some gentleman, whose experience and knowledge of medical jurisprudence render it impossible that such an unlucky omission could occur.

It is well known to persons skilled in legal medicine that, under proper treatment, persons recover from the deleterious effects of carbonic acid after many hours of exposure to the gas, and even after many hours' suspension of the circulation and respiratory movements, and it is laid down as a principle, that we should never despair of restoring animation until cadaveric rigidity is unequivocally established. If the limbs continue flexible, respiration should be imitated unceasingly for several hours (or until the occurrence of rigidity), by pressure made about twenty times in the minute upon the abdomen in the direction of the diaphragm, and simultaneously on the chest in the direction of the spine; these compressions should be assisted by the process called by the French, aspiration,* which consists in *drawing air from the lungs* through a nostril-tube, and may be executed by the mouth of an assistant or by Weiss' stomach pump; thus a certain quantity of air will be withdrawn from the cavity of the chest about sixteen times in the minute, and an equal quantity of fresh atmospheric air drawn in when the capacity of the thorax is restored by natural elasticity.† At the same time constant efforts should be made to stimulate the respiratory muscles, by galvanism, by the occasional dashing against the body of cold water if its temperature be natural, hot water (at 100° or 102°) if the temperature of the body be reduced, by careful drying and diligent friction after each affusion, and finally by flagellation, which proved so advantageous lately in a case of asphyxia from drowning reported by Dr. Ogier Ward, of Wolverhampton. These various means may be employed in succession if circumstances permit; if not, any one or two should be patiently continued. Unquestionably the great object is to excite the action of the respiratory muscles; respiration will always prove the best means of removing sanguineous congestion; but it has been proved by experiment on animals, that when the action of the heart is suspended and cannot be excited by the ordinary stimulants, the action of these stimulants will produce contractions of the heart immediately after the abstraction of a very small quantity of blood from the veins connected with the right side of that organ. Hence, if the measures tried during the first half hour be ineffectual, *three* or *four* ounces of blood may be taken from the jugular vein. This may be done at once if the asphyxia exists in a strong, well-fed individual. During the administration of the remedial means the body should be laid on a table in a room which, in cold weather, should be well warmed. The patient should be carefully removed to a warm bed when the respiratory muscles are beginning to act well. We have not recommended artificial respiration by means of the bellows and nostril-tube, because the apparatus is not always at hand, and its use is dangerous, even in the hands of medical men; indeed the injection of air into the lungs by a bellows is a very different thing from the natural entrance of air into an increased

* During the process it may be prudent to press the larynx moderately against the œsophagus, *provided a medical man be present.* During the drawing out of the piston rod the mouth and the other nostril should be accurately closed.

† The Humane Society at present employs Mr. Reid's pump, the price of which is nine guineas; it is an excellent instrument for those who advocate the injection of air, and is constructed so that it accomplishes aspiration also. Mr. Weiss will sell for thirty-two shillings a pump of twice the capacity of his stomach pump; the increase of size, although not indispensable, would be advantageous. The piston of Weiss' pump should be forced home whilst the index is opposite the letter S, and drawn out whilst the index lies over the letter B; the tube should be attached at orifice B.

space previously made for it, by the dilatation of the thoracic cavity; it is very hard to say what degree of force may prove innocuous, or insure, in so many successive injections of air, that all shall be of a harmless degree of strength, and it is well known that even the breath of one person blown into the mouth of another may produce asphyxia. It is not improbable that it was the forcible entrance into the lungs of condensed air intended to be discharged into the Eustachian tube, that caused the deaths which occurred, not very long ago, in the practice of a certain aurist. For these reasons, and also because the imitation of respiration by pressure may be practised by any person, and is, we think, equally efficacious, we have not hesitated to recommend it along with aspiration in preference to injection of air by the mouth or bellows.

The treatment which we have just sketched is, we may say, that applicable to asphyxia in general, and although it is not customary to dwell on measures of therapeutics in this portion of the Journal, we have not hesitated to break through the usual practice, inasmuch as, notwithstanding the charitable efforts of the Humane Society in diffusing through the metropolis and country a knowledge of the proper treatment of asphyxia, many, we are convinced, annually perish from default of the incessant and well directed administration of the proper remedies, which should be continued for some time after the breathing is re-established.

To illustrate our opinions we shall give a condensed account of a case quoted by a high authority in legal medicine.

"In the winter of 1802, one of the servants of the Hospital de Marat, at Narbonne, did not make his appearance at the morning visit. M. Darbon, the physician, ordered persons to proceed to his room to ascertain the cause of his absence. The door being fastened on the inside was burst open, and he was found cold, but free from cadaveric stiffness; the respiration and circulation had ceased. A pan of charcoal was found, which had been burning during the night.

The usual means were assiduously employed until two in the afternoon, but in vain. At this period M. Darbon ordered hot water at 40° Cent. (104° Fah.) to be thrown with force sometimes on his face, sometimes on the body and limbs. This was continued *for two hours* without restoring animation, but at the expiration of these two hours some signs of life were observed; stimulants were then administered by the mouth; he was removed to a warmed bed, and in two or three days was quite well, with this exception, that, formerly lively, he remained subsequently taciturn and melancholy."

The morning visit in the French hospitals is always made at an early hour; consequently it is probable this patient was found in a state of complete asphyxia between eight and nine o'clock in the forenoon, having been exposed to the vapors of charcoal during the whole period of rest, at least six hours. The circulation and respiration had been absent certainly for seven hours, probably for nine or ten hours, for it is not unlikely that the breathing and action of the heart had ceased long before he was found. Notwithstanding these disadvantages persevering attention restored him to life.

At the inquest held on the bodies of Carrol and Burke, no question (it appears) was put to ascertain whether cadaveric rigidity had unequivocally made its appearance at the time the bodies were laid aside as dead.

REVIEWS.

A Memoir of the late James Hope, M.D. By Mrs. Hope. Edited by Klein Grant, M.D. London: Hatchard and Son, 1842. 8vo. pp. 358.

The peaceful life of the medical man seldom affords any subject worthy of notice by the historian or the biographer. Engaged in the humble duty of dispensing, under a higher power, the blessings of health and life to his fellow-creatures, his field of action is confined to the sick chamber, and the reward of his merit to the consciousness of having done well. In some few instances, however, the force of merit or the concurrence of accidental circumstances, may draw forth the medical man from the obscure circle marked out for him, and render what he has said or done worthy of record.

Dr. Hope was one of those few who are destined to escape, for a time at least, the ordinary fate of man. He will not be forgotten the moment he has disappeared from the scene. His virtues and his talents were of a high order, and he well deserved the tribute which has been paid to him in the publication of the present memoir.

We, therefore, recommend it warmly to the notice of our readers, being (as the editor truly remarks) "well calculated to do good as a stimulus to honorable exertion—an example of professional conduct, and an evidence of the all-pervading power of Christian principle."

ACADEMY OF SCIENCES, PARIS.

September 5, 1842.

NEW CAUSE OF EMPHYSEMA.

M. Longet read a memoir on the nature of the intrinsical motion of the lungs and a new cause of pulmonary emphysema. The following are the conclusions at which the author arrives :—

1. When galvanism is applied to the branches sent from the vagus to the first divisions of the bronchia, it excites evident contractions in these tubes; the animals experimented on should be of lofty stature.

2. Division of the pneumogastric nerves may be followed by emphysema.

3. This seems to contradict the idea that the capillary vesicles of the lung are formed of elastic fibrous t issue.

4. Their parietes are endowed with active contractility, under the influence of the vagus.

5. This contractility ceasing on division of the vagus, it becomes impossible for the air to be renewed in the ultimate branches of the air-tubes, although their elasticity remains intact.

6. Circulation is impeded, or even suspended along the walls of these tubes, which are forcibly distended by vitiated air, containing a large proportion of carbonic acid gas.

7. Emphysema, thus complicated with pulmonary congestion, constitutes a cause of asphyxia.

TREATMENT OF HÆMATURIA.

In some cases of hæmaturia, the bladder is completely filled with coagulated blood, and the surgeon finds the greatest difficulty in relieving the organ of its contents.

In five cases of an extreme and urgent kind, M. Leroy d'Etiolles succeeded in evacuating the bladder by frequently introducing a very large gum elastic bougie, without a stilette. In one case the instrument was passed more than 100 times in a few hours, and two quarts of coagulated blood removed.

CRYPTOGAMIA IN THE ROOTS OF HAIRS.

M. Gruby presented a memoir on a new species of cryptogame, which occupies the roots of the beard, and forms a species of contagious mentagra. The disease generally occupies the chin, lips, or cheeks; the affected parts are covered with greyish and yellow scales, formed by the epidermic cells, under which is the root of the hair surrounded completely by a sheath of cryptogamia; the latter are not elevated above the surface of the epidermis.

ACADEMY OF MEDICINE, PARIS.

August 30.

VACCINATION.

M. Bousquet read a report on a memoir of M. Milon, entitled "Remarks on Vaccination." The author had occasion to observe an epidemic of small-pox and test the protective power of vaccination. The disease was invariably arrested by vaccination, but a few vaccinated persons were attacked; in all these cases the individuals had been vaccinated a long time anteriorly to the attack of small-pox, which, however, always showed itself under the form of varioloid.

It has been frequently said that the protective power of the vaccine matter is only temporary; if by this is meant that varioloid may occur at some period after vaccination, the assertion is true; but not so, if it mean that true small-pox occurs after vaccination. M. Milon does not believe that the efficacy of the vaccine matter has undergone any change from the lapse of time. "I was of the same opinion (says the reporter) up to 1836, but having then witnessed the action of new vaccine matter, I was compelled to acknowledge that the old had lost a portion of its efficacy."

MICROSCOPIC CHARACTERS OF THE SPUTA IN CONSUMPTIVE PATIENTS.

M. Sandras read a memoir on this subject. The sputa were taken from the patients incontestably laboring under phthisis, and examined with a microscope magnifying 300 diameters. The result of the author's investigations is, that the matter expectorated by consumptive patients is of a specific kind, and that the microscope is a most valuable adjunct to our means of diagnosis. The sputa of phthisical patients contains numerous round isolated globules of a grey-white color, similar in form and size to those of pus, but differing from the latter in this, that whereas pus globules are perfectly free, the former are enclosed in a flocculent envelope, which cannot be washed off from them. To see the globules well, we should avoid collecting too many of them under the field of the microscope. Another character of these globules is their complete opacity in the centre, and their gradual transparency towards the circumference. These facts were observed in forty-nine cases of pulmonary consumption.

The tubercular sputa, however, do not exist in all consumptive patients, and even in the same subject the expectorated matter presents, as we can readily understand, a variety of appearances. A remarkable fact is, that the globules now alluded to are not found in the pus taken from scrofulous glands or tubercular ulcers of the intestinal canal. The author has examined, for the purpose of comparison, the expectoration in simple catarrh. Eighteen patients were examined, but the sputa never contained any globules; they contained corpuscles differing from tubercular globules; first, in being agglomerated and not distinct; second, in being of different sizes; third, in the uncertain manner of their appearance under the field of the microscope; and fourth, in being striated on the surface.

In spite of these differential characters, some cases presented themselves in which the author hesitated; they were chiefly cases where the physical signs and the progress of the disease seemed to contradict the signs furnished by the microscope; but in these doubtful cases it generally happened that the result of the autopsy showed the instrument to have been right. These newly indicated characters may assist and complete our other means of diagnosis. The author does not, however, consider the expectorated matter as being tubercular; on the contrary, he thinks that the pus is secreted by the tissues which surround the tubercles; but he concludes that it acquires from the tubercular matter the peculiar characters which he has indicated.

OVARIAN DROPSY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—Might I presume, through you, to ask Mr. Storrs, in what situation paracentesis abdominis was performed in the case of ovarian dropsy, related by him in your Journal of the 3rd—whether in the linea alba or semilunaris?

Is it not usual to perform the operation in the linea semilunaris in cases of encysted dropsy?

I have the notes of the case of a poor woman who was tapped ninety-six times; if they would be worth inserting in your Journal, I should be glad to send them in the rough state put together by your obedient servant,

A Medical Student.

September 6, 1842.

HARVEY AND SYDENHAM SOCIETY.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—When Dr. Branson's proposition for the establishment of a society, with or without connection with the "Provincial Medical Association," for the republication of the most valuable works of the most celebrated physicians and surgeons who flourished a century or two ago, was mentioned by Dr. Hastings, I have no doubt that it was heard with feelings of satisfaction by many gentlemen present, and with the hope that it might be successfully acted upon.

That it did not come within the scope and object of the Association, as a body, was immediately obvious, and the time of the meeting was too precious to be occupied by extrinsic objects, although in some measure they might be allied to the general purposes of the Association. Very little, therefore, could be said upon it at the moment, although, perhaps, on mature consideration, the suggestion may prove not impracticable.

No doubt Dr. Boisragon's observations in reference to "Swan's Sydenham" might be correct, as also his additional one, that when at Edinburgh the booksellers there told him that numerous copies of "Buchanan's Psalms" reposed undisturbed on their shelves. The inferences from these facts, however, I would be willing to draw, are, in the one case, that medical students of the present day do not study, as they ought to do, the works of the "English Hippocrates," or perhaps they may prefer reading them in the original; and in the other, that the young students in divinity, in Scotland, do not now appreciate, as it deserves, the justly admired version of their celebrated countrymen.

In the consideration of this subject, the question will fairly be asked—is the perusal of these valuable works necessary at the present day? and are they not superseded by modern authors who have separated truth from error, theory from hypothesis, and superadded the discoveries and improvements, the results of their labors? To this it might be answered, that although young men may pass their examinations on he minimum of requirement, and so be authorised to practise without further question; yet all of generous mind, and noble ambition, and I hope they are the great majority, would naturally wish to be well grounded in medical literature—to know what had been said and done by the greatest men in the profession of former days—would gladly enlarge and extend their useful reading, and would rejoice in the opportunity of having at hand a set of volumes containing the choicest and most select works of men illustrious in medical science, selected from those of others which deserve to be forgotten, and at a very moderate pecuniary cost.

To the principal works which might be considered worthy of republication, might be added such as "Gregory's Lectures on the Duties and Qualifications of a Physician," "Percival's Medical Ethics," "Blane's Medical Logic," &c. The former of these should be read with great attention by *every* medical student at the commencement of his course of study, and the others mentioned are well worthy of the same.

If it should form any part of the plan to rescue from oblivion many very valuable papers from the various journals and transactions of societies—for example, such as several papers "On the Investigation of Disease," and "On the Study of the Works of Hoffman," which appeared many years ago in the "Medical Repository," both, I believe, by the same able writer, such might, on mature consideration, if approved, be adopted into the series.

The management, of course, would rest with the council or committee of gentlemen well acquainted with medical bibliography, and with the history and progress of medical science; and for the appointment of such committee, a general meeting of subscribers might be held early in the morning of the second day of the meeting of the Association at Leeds next year, before the general business of the Association itself commences for the day.

It is obvious that gentlemen in large practice have not much time for reading; they can scarcely do more than look through the journals of the day, and perhaps the principal modern medical works. But young men devoted to the profession, in the early part of their career, should certainly study the works of the great authors thus offered to their perusal; which, together with the curriculum prescribed by the examining boards, at the hospitals and metropolitan and provincial medical schools, afford full and ample opportunities of fulfilling a finished course of education.

These liberal studies combined will produce not only skilful and able practitioners, but gentlemen of elegant taste, and well regulated and enlightened minds.

I am, Gentlemen,

Faithfully yours,

THOS. MARTIN.

Reigate, 13th September, 1842.

MEDICAL MEN AND THE INCOME-TAX.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—In reply to a country practitioner, I would suggest two methods as justifiable in order to avoid the income-tax on horses and carriages used for professional purposes. Never to go out on pleasure without, if possible, making a professional call on the way; when this cannot be effected, to *hire*. This would be easy in a town, but, perhaps, not quite so to us in the country. In the former instance, I think, proof of having transacted business ought to be sufficient cause for exemption.

I am, Gentlemen,

Your obedient servant,

ROLAND.

September 13, 1842.

RETROSPECT OF THE MEDICAL SCIENCES.

POLYPOUS TUMORS OF THE NASAL FOSSÆ.

Dr. Watson, surgeon to the New York Hospital, classes nasal polypi as follows:—1st, The mucous polypus; 2nd, the polypus from hypertrophy, induration, and infiltration of the mucous and submucous tissues; 3rd, the fleshy polypus, or caruncular excrescence; 4th, the fibrous; 5th, the gelatinous; and 6th, the carcinomatous. Cases of osseous polypi and of lipomatous tumors, originating within the nostrils, have been mentioned; and Dr. Watson, in addition, speaks of tumors affecting the external surface of the nose, which he calls external nasal polypi.

Our knowledge of the causes of nasal polypi is as yet indefinite; among the most common are mechanical injuries, local irritation, follicular inflammations, suppressed secretions, atmospheric changes, and vitiations of the general health. The points of adhesion for the first two forms of polypi are probably confined to the tissues lining the external and upper wall of the nostril, and the maxillary sinus. The seat of the third is not so strictly limited; its most frequent attachment is near the external orifice of the nostril, at or below the turbinated bones. The fourth is equally indefinite in its point of attachment. It is most frequently found near the posterior nares; it may arise from the fauces, and probably from the septum. Dr. Mott had a case of double fibrous polypi arising from the floor of the nostril. The fifth, or gelatinous, may arise in the maxillary sinus, and in its progress form adhesions within the sphemoidal and ethmoidal cells, along the spheno-maxillary fissure, and on the floor of the nostril. The carcinomatous polypus is not restricted to any definite point of attachment; it is rarely or never pedunculated, but in its progress it attacks every part alike. Polypous tumors may also originate from the frontal sinuses, the inner surface of the nasal bones and ossa palati, the under surface of the os unguis, the cells of the ethmoid and sphenoid bones, from the sides of the pharynx, the base of the tongue, and the upper and anterior part of the œsophagus.

Polypous growths may be confounded with chronic coryza, follicular ulceration of the mucous surfaces, ozæna, whether scrofulous, carcinomatous, or syphilitic, an unusually large projection of the free border of the lower turbinated bone, an inordinate distortion of the septum, a hernia of the brain and its envelopes, descending through an opening in the cribriform plate of the æthmoid, and finally, foreign bodies introduced into the nostril. Cruveilhier has recorded an instance where cerebral hernia was mistaken for a polypus, and Boyer the case of a pea introduced by an infant into the nostril, where it germinated, and expanded its roots to the length of three and a quarter inches.

The mucous polypus is the most common form, and the most apt to arise suddenly. It consists of pale, bulging lobules, filled with mucus, which are separated from each other by bands of firm cellular membrane. The true cause of these tumors is the accumulation of mucus within the muciparous follicles, occurring either from a change in the consistence of the mucus, or from obliteration or obstruction of the ducts. In this respect they resemble the sebaceous and encysted tumors of the scalp and other parts of the body, the only essential difference being owing to difference of function—that is, to the different nature of their secretions.

The second form, the polypus from hypertrophy, &c., occurs, perhaps, almost as frequently as the first, and the two are often seen together. It is, in fact, a prolapsus of the thickened and consolidated Schneiderian membrane, attended with infiltration of fluid into the subjacent cellular tissue, the result of supervening inflammation. The whole pituitary membrane is sometimes found in a state of hypertrophy or thickening, giving rise to most of the inconveniences of nasal polypi, but under which head it cannot be classed, unless some portion of the membrane become more developed than the rest. Dr. Watson considers that this hypertrophied polypus is analogous to a kind of tumor which frequently occurs near the lower part of the rectum, and at the verge of the anus, in persons subject to hæmorrhoids, and other disorders giving rise to thickening and prolapsus of the lining membrane of the intestine. Both the first and second forms of polypus are most readily and effectually removed by the straight forceps, the curved ones being had recourse to only when the tumor is inaccessible with a straight pair, or is seated so far back as to be most readily removed through the mouth. The use of the scissors, bistoury, and other sharp instruments should be restricted to cases where the peduncle is readily brought to view, and where it is attached very near the external surface. The hæmorrhage is usually very slight. The treatment by puncture is best adapted to recent polypi, the lobes of which are few, but large, and the investing membrane not thickened nor indurated. The punctures should be made with a narrow, straight bistoury, plunged deeply into the polypus, but not so far as to injure the sound parts, and repeated in several places. The mucus flowing from these punctures soon causes collapse of the tumor.

The third form—the fleshy or caruncular excrescence—is vascular, of a florid red color, and, though not painful except when irritated, is possessed of a certain degree of sensibility; it is less likely to be peduncular than the other benignant forms of polypus. Dr. Watson considers it resembles the fungous growths in the urethra caused by irritation. The unusually large turbinated bone is most likely to be mistaken for this variety of polypus. When small, it is best treated by repeated applications of caustics, care being taken not to injure the adjoining parts; if large and pendulous, it may be removed with the scissors or bistoury, the base being afterwards touched with caustic, or, if the base be too broad, a ligature may be applied.

The fibrous polypus is invariably attached by a pedicle as firm and fibrous as itself. It is usually solitary, and sometimes acquires a great size, encroaching on the surrounding parts, causing ulceration, hæmorrhage, destruction of the bones, and even death. The older writers described it as the scirrhous or cancerous polypus. Similar tumors occur in other parts of the body. When the neck of this

polypus is narrow, readily reached, and easily divided, the scissors may be used; if firmer or less accessible, the forceps should be had recourse to. The application of the permanent ligature is tedious and annoying, but there are cases in which it alone is admissible. The ordinary polypus forceps is the most useful instrument for its application. In using this instrument for the purpose, we should prepare a ligature of silver, copper, or steel wire, cat-gut, strong silk thread well twisted, or of stiff cord, long enough to double over the tumor, and to allow its two extremities to reach somewhat beyond the handles of the forceps. After doubling the ligature in the form of a loop, its two extremities are to be passed, one through each eye of the forceps, and brought down along the blade, so as to be well secured at the handle. The loop or curved portion of the ligature is then to be cast over the body of the polypus, and tightened upon its neck. When thus fixed, the blades of the forceps are to be closed, and the extremities of the ligature are to be drawn with force necessary to strangulate the tumor, and then secured upon the shaft or handles of the forceps, to prevent them from slipping. The ligature, thus placed, may be tightened as frequently as required, until the tumor separates; or, if necessary, by rotating the forceps immediately after fixing the ligature, the tumor may be twisted off at once. The finger and thumb may be occasionally used in twisting it off. When it is sufficiently accessible, and again, when it is of enormous size, it may be necessary to cleave the soft palate previously to its removal.

The gelatinous polypus is of rare occurrence. Dr. Watson has met with only one instance of what he calls the gelatinous polypus, but which appears to be rather the medullary fungus, or soft cancer. The case terminated fatally. Dr. Watson considers it allied to the lymphatic abscess of the antrum of Kirkland, the osseous cyst of Velpeau. His patient was a gentleman, about thirty-five years of age, who had a tumor, which apparently commenced in the left nostril, or among the cells at the base of the skull, thence gradually extended outwards to the cheek and left side of the head, upwards against the left orbit, downwards into the fauces, and against the root of the tongue, until it had almost completely obstructed the passage into the throat. The functions of the adjoining organs were lost in consequence, and great deformity and distortion were produced by it. The integuments over the tumor were glossy; the superficial veins were tortuous and much enlarged. The tumor was elastic, and gave the impression of fluctuation more or less distinctly in all parts, except at some circumscribed spots, which gave the impression of yielding bone beneath. After the patient's death, the morbid mass was found blocking up and distending the antrum, the parietes of which were burst asunder, and excessively attenuated, being on the cheek not thicker than an egg-shell. The septum narium and bony palate were either absorbed or much distorted and attenuated. The mouth and pharynx, and the cells of the sphenoid and æthmoid bones were filled with the tumor, which extended into the posterior part of the left orbit, through the spheno-maxillary fissure, and also through the sphenoid to the base of the brain. The whole of the bones were softened and diseased, but not degenerated into a substance similar to the tumor. The disease appeared to have originated in the antrum, probably between the mucous membrane and the bone, and without involving the bone otherwise than by pressure, to have extended from this to the surrounding cavities. The morbid deposit was surrounded by a sort of imperfect capsule, with subdivisions of cellular tissue, some of these exceedingly delicate, and all of them filled with a gelatinous semi-fluid substance, of a transparent pale white or amber color. At some points this matter was more like soft calf's foot jelly, without any visible envelope; but here and there the tumor contained opaque, grumous, bloody deposits, and these were most abundant at the outer lobes of the tumor, just in front of and below the ear. The brain, except at the cella turcica, was unaffected.

Kirkland's description of the lymphatic abscess does not at all correspond to this. He says, "The first symptom the patient perceives of his complaint is a swelling, in consequence of lymph being gradually collected in this cavity, without inflammation or pain, distending the bone till it becomes as thin as parchment, and sometimes forming a tumor under the upper lip of a very large size."

Any operation upon this form of disease, to be effectual, must be practised early; partial extirpation only expedites the growth and leads more rapidly to the fatal issue. It must be attacked in its ultimate recesses for success; the bony case of the nostril must be opened, the antrum exposed, or the upper jaw partially or totally extirpated. It has even been proposed to follow the disease into the chambers of the sphenoid bone, but experience has shown that even under the most promising circumstances, the chances for success by operation are by no means flattering, and it is exceedingly doubtful whether it should ever be undertaken after the disease has extended to the delicate cells of the sphenoid, to the pterygoid processes, to the orbitar processes of the frontal bone, or to any point remote from the upper maxilla or malar bone.

Malignant tumors may arise at any point within the nasal fossæ, or in the sinus adjacent, or in any of the tissues surrounding these cavities; but they most frequently originate in the periosteum or bony structure of the upper jaw. Until the appearance of the characteristic fœtid sanious discharge, they may be mistaken for ozæna, chronic corzya, or the less dangerous polypi. The cancerous disease interferes with the vicinal tissues mechanically, causing distortion, inflammation, &c., by pressure, and also by converting them into a substance similar to itself, the morbid deposit first showing itself in detached points, and afterwards breaking up and mixing more intimately with the healthy textures, which are ultimately completely destroyed. The morbid mass increases by interstitial development, and by a sort of budding or pullulating process, rounded nodules emerging now and then from the growth, and increasing to an indefinite extent, each having a distinct cellular envelope, from which it derives its blood. Minute cysts are sometimes found in the centre of the scirrhous mass, or small vesicles may arise near the ulcerated surface, becoming more opaque and solid as they enlarge. Carcinomatous deposits take place in other parts of the body, the general health fails, hæmorrhage either

from the tumor or from the rupture of tortuous varicose veins takes place, the general cachexia is increased, and death closes the scene.

The duration of these tumors is exceedingly variable; in some the disease progresses to a fatal issue in a very few months, and in others it continues for many years. As a general rule, carcinomatous tumors that are very vascular, or soft at the commencement, or soon after their first appearance, terminate more rapidly than those of a scirrhous character, and more rapidly in proportion to the youth of the patient. Dr. Watson is of opinion that it is not unreasonable to hope that the malignant polypus nasi (the carcinoma in question) when attacked early and before the surrounding parts are much involved, may be arrested in its progress, if not effectually and permanently eradicated. It must be evident that for any advantage to be derived from an operation, it must be practised early, and every portion of apparent disease eradicated.

The last form, which Dr. Watson calls external polypus of the nose, bears some resemblance to the second variety of internal polypus; it is, in fact, dependant on hypertrophy of the integuments and cellular tissue, attended with serous and fibrinous infiltration, and excessive development of the sebaceous cryptæ proper to the integuments. Mr. Liston calls it lipoma of the nose. Its most frequent seat is just above the lobe of the nose or on the ala nasi. It is slow of growth, not painful, assumes the pyriform shape, and may occur singly or in groups. The disease, Mr. Liston says, is limited to the skin and subjacent cellular tissue, which is opened out, and somewhat thickened, the sebaceous cryptæ are enlarged and distended with their secretions, some of them to a considerable degree; the cellular tissue is loaded with serosity, and in some places there is evidently fibrinous deposit. The veins are sometimes enlarged. These tumors are strictly local, and may be safely extirpated with caution; when once removed they are not disposed to return. They occur chiefly in persons advanced in life, who are addicted to the pleasures of the table, and whose features are injected and of a florid or purplish hue. The chief care in their removal must be directed not to injure the cartilages, and to arrest the hæmorrhage, which is generally very brisk. After their extirpation the nose is said to be restored to its proper shape, and the natural color of the integuments has been in all cases more or less perfectly restored.—*Amer. Journ. Med. Sci.*, April, 1842.

THE MALPIGHIAN BODIES OF THE KIDNEY.

Mr. Bowman, of King's College, has published a communication in the "Philosophical Transactions," in order to prove that the uriniferous tubes end in a peculiar manner in the Malpighian bodies, and to found on this view of the structure of the kidney some new considerations respecting the mode in which its secreting function is performed.

The Malpighian bodies are embedded at pretty equal distances among the convoluted uriniferous tubes, one being situated at the extremity of each. They are supplied with blood by the glandular branches of the renal artery, which enters between the bases of the medullary cones; these send off straight branches through the cortex, from which arise numerous fine terminal twigs, each one of which goes to a Malpighian body, and may be termed its afferent vessel. This breaks up into a little system of capillaries enclosed within the dilated extremity of one of the convoluted tubes, forming the Malpighian tuft, the dilated portion of the tube being the Malpighian capsule. The blood leaves each tuft by a solitary efferent vessel, which passes out at the same point at which the afferent vessel entered. It is then conveyed directly into a very close plexus of capillaries surrounding the uriniferous tubes, which derives its blood from no other source, and which empties itself into branches of the renal vein; these accompany the arteries to the bases of the medullary cones, where they emerge from the organ, previously receiving the blood of those plexuses, which derive it from the Malpighian bodies near the cones. These several parts are held together by a dense intertubular homogeneous substance called the matrix, most abundant in the medullary cones, less so in the cortical portion.

The walls of the uriniferous tubes consist of the basement membrane and the epithelium, the former membrane at the termination of the tube being expanded over the Malpighian tuft, to constitute its capsule. It is pierced by the afferent and efferent vessels of the tuft at its further extremity, which are united to it as they pass, the tuft itself lying free and loose in its cell, not covered by any reflexion from the capsule, but every twisted capillary composing it being quite bare. The epithelium near the capsule, which it partly lines, is clothed with vibratile cilia, constantly impelling a current down the tube. When within the capsule it is no longer ciliated, but is always of excessive delicacy and translucence.

Mr. Bowman, speaking of the renal circulation, says, there are two perfectly distinct systems of capillary vessels in the kidneys, through which the blood passes in succession in its course from the arteries into the veins: first, that inserted into the dilated extremities of the uriniferous tubes, and in immediate connection with the arteries; secondly, that enveloping the convolutions of the tubes and communicating directly with the veins. The efferent vessels of the Malpighian bodies that carry the blood between these two systems may collectively be termed the portal system of the kidney. To these distinct capillary systems Mr. Bowman attributes distinct parts of the function of the organ.

The Malpighian capillary system is made up of as many isolated parts as there are bodies, and as there is not any inosculation between their arterial branches, the blood enters each in a direct stream from the main trunk. This capillary system is also remarkable in being bare, uncovered by any structure. Each separate part of this system has but one afferent and one efferent channel, both exceedingly small, compared with the united capacity of the capillary tuft. Hence must arise a greater retardation of blood in the tuft than occurs probably in any other part of the vascular system. The other capillary system, that surrounding the tubes, corresponds in every important respect with that investing the secreting canals of other glands; the vessels anastomose freely on every side, and lie on the surface of the membrane furnishing the secretion.

The series of vessels connecting these two is called by Mr. Bowman the portal system of the kidney; it intervenes between two capillary networks, the first

of which answers to that in which the vena porta originates, and the second to that in which it terminates. The obvious difference in the non-formation of a single trunk is owing to the vessels issuing from the Malpighian tufts being disseminated pretty equally throughout the plexus surrounding the tubes, and therefore entering it all points at once, without uniting. In the medullary cones, where there is a corresponding plexus to be supplied with blood, but no Malpighian bodies nearer than their base, the two capillary systems are at some distance apart. Here, accordingly, the Malpighian bodies are generally larger, their efferent vessels more capacious, and branched after the manner of an artery. Each one of these efferent vessels is truly a portal vein in miniature.

In animals which have a true portal vein, derived from distant parts, distributed through the kidneys, the efferent vessels terminate in its branches, so that they may be regarded as radicles of the portal vein, emptying themselves through it into the plexus surrounding the tubes.

Mr. Bowman's theory of the elimination of the urine is as follows :—

1. That the epithelium lining the tubes is the proper organ that secretes the characteristic products of the urine from the blood; and that it does this by first assimilating them into its own substance, and afterwards giving them up on its free surface.

2. That these proper urinous products require for their solution a large quantity of water.

3. That this water is furnished by the Malpighian tufts of capillaries, placed at the extremities of the uriniferous tubes.

4. A further use of the Malpighian bodies seems to be that of sharing in regulating the amount of water in the body.

Mr. Bowman concludes with three remarks, founded on the facts and speculations advanced by him.

1. The bile and urine have been ever classed together as the most important excretions. The former is secreted from venous blood; the latter, it has been thought, from arterial blood, except in some inferior animals, in which the blood from the hinder parts of the body circulates through the kidneys. But it is a most striking fact, that the proximate principles of the urine, like those of the bile, are secreted in all animals from blood that has already passed through one system of capillaries; in a word, from portal blood; although it does not appear to what extent its qualities are changed by traversing the Malpighian system. The analogy is at least remarkable, and may throw some light on the mysterious meaning of the portal circulation.

2. Diuretic medicines appear to act specially on the Malpighian bodies, and various foreign substances, particularly salts, which, when introduced into the blood, pass off by the urine with great freedom, exude in all probability through this bare system of capillaries. The structure of the Malpighian bodies indicates this, and also, as far as they are known, the laws regulating the transmission of fluids through organised tissues, modified in their affinities by vitality.

3. The escape, also, of certain morbid products, occasionally found in the urine, seems to be from the Malpighian tufts. He alludes especially to sugar, albumen, and the red particles of the blood; the two first of which would transude, while the last could escape only by rupture of the vessels.

ABSCESS OF THE BRAIN.

The following case is recorded in the medical report of the Military Asylum, Chelsea:—A lad, eight years old, about a week before he was admitted into the asylum had a fall in the street, striking the left side of his head against the ground. No injurious effects resulting for a fortnight excepting loss of appetite, nothing was done save the administration of a purgative after he had been admitted to the asylum. After the lapse of a fortnight from the injury he was sent into the hospital; he was inactive and dull, without appetite, and complained of headache on the left side of the forehead, where, about an inch above the superciliary ridge, there was a small inflamed spot from which a few drops of purulent matter were squeezed out. A calomel and scammony purgative was given, and the little boil was poulticed. Febrile symptoms came on in a few days, and he complained more of the pain in the forehead; leeches were applied and with apparent advantage; the pain was moderated and the febrile symptoms diminished; he was observed to doze a great deal and be unwilling to be disturbed. He died two days after.

On examination of the body, a small carious perforation of the cranium, capable of admitting a small-sized probe, was observed on the left side of the forehead, where the pain had been most complained of. The surrounding bone had a dull red appearance, and on the corresponding part of the brain there was a spot of ecchymosis about the size of a sixpence. The anterior lobe of the left hemisphere appeared of a straw or greenish yellow color, evidently denoting the site of an abscess, and giving distinct fluctuation when pressed; on attempting to slice it the brain gave way, and about two ounces of bland inodorous pus gushed out. The thinnest part of the cyst was at the anterior part near the ecchymosed spot, just above the perforation in the frontal bone. The cavity was vascular and of a dull red color. The posterior part of the left lateral ventricle was found filled with pus, but it was difficult to say whether it had existed there prior to death, or took place from the bursting of the cyst of the abscess during the dissection.

The other viscera were healthy.

Mr. Lawrance, the surgeon to the institution, considers that this was a chronic abscess of the brain, originating independently of the fall, although the accident may have accelerated the fatal termination, as it is scarcely probable that so large a collection of matter could have formed and made its way externally in so short a time as from the date of the fall (about three weeks), and with so little constitutional irritation.—*Med. Chir. Rev.*, July 1842.

PREPARATION OF CYANIDE OF POTASSIUM.

Take eight parts of ferro-cyanide of potassium, dry it well by gentle calcination on a hot iron plate; mix it well in fine powder with three parts of the dry carbonate of potash, and throw the mixture into a Hessian crucible, previously raised to a dull red heat, and maintained thereat; the mixture will first melt into a brown magma, with rapid disengagement of gas; in a few minutes afterwards, when the fluid mass has been heated to redness, the dark color will be seen to become brighter, and, by continuing the fusion, the contents of the crucible will become of a clear amber

yellow. If a warm glass rod be introduced from time to time, the portion which adheres to it, when withdrawn and allowed to solidify, will at first be of a brown color, then yellow, and lastly, at the end of the operation, the liquid which adheres to the glass rod will be clear and colorless like water, and will set into a crystalline mass of a brilliant white. During the fusion brown flashes will be seen floating in the liquid, which will unite, assume a grey color, and, when the liquid is cooling slowly, will be deposited at the bottom of the vessel. The deposition may be facilitated by agitation once or twice with the glass rod. The supernatant mass may then be poured off, clear from the iron precipitate. The liquid mass thus poured off consists of the cyanide of potassium with the cyanate of potash, in the proportion of five atoms of the former to one of the latter.—*Liebig, Annalen der Chimie und Pharmacie.*

M. LIEBIG ON THE SOURCE OF ANIMAL HEAT.

All living creatures, whose existence depends on the absorption of oxygen, possess within themselves a source of heat independent of surrounding objects. This truth applies to all animals, and extends, besides, to the germination of seeds, to the flowering of plants, and to the maturation of fruits. It is only in those parts of the body to which arterial blood, and with it the oxygen absorbed in respiration, is conveyed, that heat is produced. Hair, wool, or feathers do not possess an elevated temperature. This high temperature of the animal body, or, as it may be called, disengagement of heat, is uniformly and under all circumstances the result of the combination of a combustible substance with oxygen. In whatever way carbon may combine with oxygen, the act of combination cannot take place without the disengagement of heat. It is a matter of indifference whether the combination take place rapidly or slowly, at a high or at a low temperature; the amount of heat liberated is a constant quantity. The carbon of the food, which is converted into carbonic acid within the body, must give out exactly as much heat as if it had been directly burnt in the air or in oxygen gas; the only difference is, that the amount of heat produced is diffused over unequal times. In oxygen, the combustion is more rapid, and the heat more intense; in air it is slower, the temperature is not so high, but it continues longer.

It is obvious that the amount of heat liberated must increase or diminish with the quantity of oxygen introduced in equal times by respiration. Those animals which respire frequently, and consume much oxygen, possess a higher temperature than others, which, with a body of equal size to be heated, take into the system less oxygen. The temperature of a child (102°) is higher than that of an adult (99·5°). That of birds (104° to 105·4°) is higher than that of quadrupeds (98·5° to 100·4°) or than that of fishes or amphibia, whose proper temperature is from 2·7° to 3·6° higher than that of the medium in which they live. All animals, strictly speaking, are warm-blooded; but in those only which possess lungs is the temperature of the body quite independent of the surrounding medium.

The most trustworthy observations prove that in all climates, the temperate zones as well as at the equator or the poles, the temperature of the body in man, and in what are commonly called warm-blooded animals, is invariably the same; yet how different are the circumstances under which they live!

The animal body is a heated mass, which bears the same relation to surrounding objects as any other heated mass. It receives heat when the surrounding objects are hotter, it loses heat when they are colder than itself.

We know that the rapidity of cooling increases with the difference between the temperature of the heated body and that of the surrounding medium; that is, the colder the surrounding medium the shorter the time required for the cooling of the heated body.

How unequal, then, must be the loss of heat in a man at Palermo, where the external temperature is nearly equal to that of the body, and in the polar regions, where the external temperature is from 70° to 90° lower.

Yet, notwithstanding this extremely unequal loss of heat, experience has shown that the blood of the inhabitant of the arctic circle has a temperature as high as that of the native of the south, who lives in so different a medium.

This fact, when its true significance is perceived, proves that the heat given off to the surrounding medium is restored within the body with great rapidity. This compensation takes place more rapidly in winter than in summer, at the pole than at the equator. Now, in different climates the quantity of oxygen introduced into the system of respiration, as has been already shown, varies according to the temperature of the external air; the quantity of inspired oxygen increases with the loss of heat by external cooling, and the quantity of carbon or hydrogen necessary to combine with this oxygen must be increased in the same ratio.

It is evident that the supply of the heat lost by cooling is effected by the mutual action of the elements of the food and the inspired oxygen, which combine together. To make use of a familiar, but not on that account a less just illustration, the animal body acts, in this respect, as a furnace, which we supply with fuel. It signifies nothing what intermediate forms food may assume, what changes it may undergo in the body, the last change is uniformly the conversion of its carbon into carbonic acid, and of its hydrogen into water; the unassimilated nitrogen of the food, along with the unburned or unoxidised carbon, is expelled in the urine or in the solid excrements. In order to keep up in the furnace a constant temperature, we must vary the supply of fuel according to the external temperature, that is, according to the supply of oxygen.

In the animal body the food is the fuel; with a proper supply of oxygen we obtain the heat given out during its oxidation or combustion. In winter, when we take exercise in a cold atmosphere, and when consequently the amount of inspired oxygen increases, the necessity for food containing carbon and hydrogen increases in the same ratio; and by gratifying the appetite thus excited, we obtain the most efficient

protection against the most piercing cold. A starving man is soon frozen to death; and every one knows that the animals of prey in the arctic regions far exceed in voracity those of the torrid zone.

In cold and temperate climates, the air, which incessantly strives to consume the body, urges man to laborious efforts in order to furnish the means of resistance to its action, while, in hot climates, the necessity of labor to provide food as far less urgent. Our clothing is merely an equivalent for a certain amount of food. The more warmly we are clothed the less urgent becomes the appetite for food, because the loss of heat by cooling, and consequently, the amount of heat to be supplied by the food, is diminished.

If we were to go naked, like certain savage tribes, or if in hunting or fishing we were exposed to the same degree of cold as the Samoyedes, we should be able with ease to consume 10 lbs. of flesh, and perhaps a dozen of tallow candles into the bargain, daily, as warmly clad travellers have related with astonishment of these people. We should then also be able to take the same quantity of brandy or train oil without bad effects, because the carbon and hydrogen of these substances would only suffice to keep up the equilibrium between the external temperature and that of our bodies.

According to the preceding expositions, the quantity of food is regulated by the number of respirations, by the temperature of the air, and by the amount of heat given off to the surrounding medium. No isolated fact, apparently opposed to this statement, can effect the truth of this natural law. Without temporary or permanent injury to health, the Neapolitan cannot take more carbon and hydrogen in the shape of food than he expires as carbonic acid and water; and the Esquimaux cannot expire more carbon and hydrogen than he takes into the system as food, unless in a state of disease or of starvation. Let us examine these states a little more closely.

The Englishman in Jamaica sees with regret the disappearance of his appetite, previously a source of frequently recurring enjoyment; and he succeeds, by the use of Cayenne pepper and the most powerful stimulants, in enabling himself to take as much food as he was accustomed to eat at home. But the whole of the carbon thus introduced into the system is not consumed; the temperature of the air is too high, and the oppressive heat does not allow him to increase the number of respirations by active exercise, and thus to proportion the waste to the amount of food taken; disease of some kind, therefore, ensues.

On the other hand, England sends her sick, whose diseased digestive organs have in a greater or less degree lost the power of bringing the food into that state in which it is best adapted for oxidation, and therefore furnish less resistance to the oxidising agency of the atmosphere than is required in their native climate, to southern regions, where the amount of inspired oxygen is diminished in so great a proportion; and the result, an improvement in the health, is obvious. The diseased organs of digestion have sufficient power to place the diminished amount of food in equilibrium with the inspired oxygen; in the colder climate, the organs of respiration themselves would have been consumed in furnishing the necessary resistance to the action of the atmospheric oxygen.

In our climate, hepatic diseases, or those arising from excess of carbon, prevail in summer; in winter, pulmonic diseases, or those arising from excess of oxygen, are more frequent.

The cooling of the body, by whatever cause it may be produced, increases the amount of food necessary. The mere exposure to the open air, in a carriage or on the deck of a ship, by increasing radiation and vaporisation, increases the loss of heat, and compels us to eat more than usual. The same is true of those who are accustomed to drink large quantities of cold water, which is given off at the temperature of the body, 98·5°. It increases the appetite, and persons of weak constitution find it necessary, by continued exercise, to supply to the system the oxygen required to restore the heat abstracted by the cold water. Loud and long continued speaking, the crying of infants, moist air, all exert a decided and appreciable influence on the amount of food which is taken.—*From Liebig's Animal Chemistry.*

OBITUARY.

Assistant-surgeon E. J. Pridham, 2nd European Light Infantry, died July 2, at Poonah, of abscess of the liver.

At Ningpo, China, on the 25th of February, of a pulmonary affection, Apothecary John M'Kenzie, of the 49th regiment, aged thirty-eight.

PROMOTIONS AND APPOINTMENTS.

MILITARY.

53rd Foot—Assistant-surgeon John Du Verd Leigh, M.D., from the 76th foot, to be assistant-surgeon, vice Logan, promoted.

INDIAN MEDICAL APPOINTMENTS, &c.

Bombay—Medical Establishment.—Surgeon J. Bowstead returned to duty from furlough to Europe; Surgeon J. Mc Lennan appointed surgeon to the Hon. the Governor; Assistant-surgeon R. Collum appointed deputy medical storekeeper at Sukkur; Assistant-surgeon G. Maitland, attached to do duty in the Native General Hospital; Assistant-surgeon W. Bowie, M.D., lately relieved from civil duty at Broach, directed to do duty at the presidency; Assistant-surgeon M. Style, attached to do duty in the European General Hospital; Assistant-surgeon J. Tristrail, attached to the Convalescent Hospital.

Assistant-surgeons admitted to the Service—Messrs. J. Peet, G. G. W. Maitland, J. Cornish, and M. Style.

Bengal—Medical Department.—Assistant-surgeon A. Campbell Duncan, M.D., promoted to surgeon, vice Harpur, deceased; Assistant-surgeon Elliott, permitted to resign his appointment as medical officer of the Medridpore agency, and Malwah contingent, and is placed at the commander-in-chief's disposal—directed to do duty at Neemuch; Surgeon A. C. Duncan, M.D., posted to the 62nd regiment, N.I.; Surgeon H. Chapman, appointed presidency surgeon, vice Nicolson, resigned the situation; Assistant-surgeon J. Balfour, appointed to the civil station of Bareilly.

Madras—Medical Department.—Assistant-surgeon H. Cheape, posted to 37th Grenadiers; Assistant-surgeon J. Ralton, posted to the Infantry Veteran Com-

pany at Vizagapatam; Assistant-surgeon E. J. Barker, posted to the 1st regiment Light Cavalry; Assistant-surgeon J. Tait, appointed to act as Zillah surgeon at Nelore; Assistant-surgeon D. Macfarlane, M.D., removed from 1st European regiment to 1st battalion of Artillery; Assistant-surgeon F. Le Mesurier, M.D., posted to the 2nd battalion of Artillery.

Assistant-surgeons admitted on the Establishment—Messrs. H. Young, K. Mc K. Adams, M.D. and A.M., T. L. Bell, J. W. Ferminger, and C. B. Craske.

Assistant-surgeon M. Stovell, civil oculist, allowed leave of absence on sick certificate till October 20, to visit the Deccan.

Surgeon N. Wallich, M.D., superintendent of the Hon. Company's botanic garden, has obtained leave of absence for two years, to proceed to the Cape of Good Hope or New South Wales, for the benefit of his health.

APOTHECARIES' HALL.

Licentiates admitted Thursday, September 8, 1842.

W. Brumfit, Shipley; J. Wilkins, Honiton; R. Colgate, Dorking; G. Ross, Davenport; R. N. Newcomb, Carby, Lincolnshire.

DOCTOR GRAVES' CLINICAL MEDICINE.

Early this Month will be Published, in one large, closely-printed volume, octavo,

A SYSTEM of CLINICAL MEDICINE. By Robert James Graves, M.D., Physician to the Meath Hospital and County Dublin Infirmary, lately Queen's Professor of the Institutes of Medicine, &c. &c.

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DR. THEOPHILUS THOMPSON will deliver a COURSE of LECTURES on the Principles and Practice of Physic, commencing October 3, at Seven, p.m.; and Dr. HEMING on Midwifery and Diseases of Women and Children, commencing Wednesday, October 5th, at Seven, p.m.

For particulars, apply at the Lecture-room, 10, Gower-street North, or at the residences of the Lecturers—Dr. Theophilus Thompson, 15, Keppel-street, Russell-square; Dr. Heming, 7 B, Manchester-square.

SCHOOL OF PHARMACY.

WINTER COURSES of LECTURES to be delivered at the Establishment of the Pharmaceutical Society, 17, Bloomsbury-square.

Chemistry—George Fownes, Ph. D.
Materia Medica—A. T. Thomson, M.D., F.L.S.
Practical Pharmacy—Mr. S. Redwood.

An Introductory Opening Lecture will be delivered by Mr. Redwood, on Wednesday Evening, the 28th of September, at Nine o'Clock precisely, to which any Member of the Medical Profession will be admitted.

For further particulars, apply to the Secretary, on the premises.

SKELETONS, SKULLS, WAX MODELS, &c.

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MESSRS. I. C. and S. STEVENS have the honor to announce they will SELL BY AUCTION, at their Great Room, 38, King-street, Covent-garden, on Thursday, the 22nd of September, and six following days (Sunday excepted), at Twelve o'Clock, the very extensive and valuable MUSEUM of MORBID, HUMAN, and COMPARATIVE ANATOMY, formed by G. Langstaff, Esq., during a period of upwards of thirty years, with indefatigable labor, and at a very great cost.

May be viewed three days prior to the Sale, and Catalogues (1s. each) had of Messrs. I. C. and S. Stevens, 38, King-street, Covent-garden.

N.B.—A Catalogue *raisonnée* of the Collection is Published by Churchill, Princes-street, Soho (price 10s).

JOURNALS AND BOOKS FOR REVIEW TO BE FORWARDED (CARRIAGE PAID), TO THE PUBLISHER, 356, STRAND.
LETTERS AND COMMUNICATIONS TO DR. HENNIS GREEN, 58, MARGARET STREET, CAVENDISH SQUARE, LONDON.

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PROVINCIAL MEDICAL JOURNAL

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A CASE

UNSUCCESSFULLY TREATED BY

THE HYDROPATHIC METHOD,

WITH REMARKS.

By Charles Hastings, M.D., F.G.S.,

Physician to the Worcester Infirmary, and Secretary to the Provincial Medical and Surgical Association.

It may well be doubted whether there is any country on the face of the earth in which quackery is so successfully followed as in rich and credulous England. Germany—mystical Germany—may be more favorable for the friendly reception of paradoxical systems of medical theory and practice, and for the fostering and incubating hypothetical and fanciful notions of therapeutic agents; but she must yield the palm to England in the practical application of those faculties to the gullibility of the public, and to the capability of turning these discoveries to the more homely purpose of filling the pockets of those who deal in these mysterious modes modes of conferring health and long life on the community at large. John Bull is himself too honest to condescend to these pitiful practices; and hence, good soul! he never suspects that the wily and the presumptuous can pluck him with impunity.

The water-cure has been introduced into this country with such pomp and ceremony, and its claims to distinction, as the most effectual means of dismissing all the pains which flesh is heir to, have been set forth with such unblushing effrontery, that those unaccustomed to consider the devious and dishonest courses, which in all ages have been resorted to, in order to prop up fallacious systems, might have been led to think, that at length some important discovery had been accidentally stumbled upon by a German peasant, and that, henceforth, the age of man was to be prolonged, and his pains and calamities would be relieved.

Malvern has become the resort of one of the heroes of this new system of delusion, and he has, of course, made many cures; in fact, he is infallible, and the following case having fallen under my observation, I deem it not unworthy the perusal of your readers.

Master D., aged five, was perfectly well on coming to Malvern on the 22nd of July. About the 27th he began to look languid, and he continued to get rather worse, but not so as to be confined to the house until the 30th of that month; on that day he appeared feverish and irritable, and the tongue was reddish; he had been frightened on that day by a donkey falling, and for some days before had eaten heartily of improper food. The water-doctor saw him on that day, and said he had gastric irritation, and that he would be well in a day or two. He ordered the bowels to be fomented with flannels wrung out of hot water, till perspiration came on; he did not allow him anything but toast and water.

On the 31st the doctor said he was much better; but he remained feverish in the evening and cooler in the morning for several days. For the first four days the fomentations were continued whenever he was feverish.

He had one dose of castor oil given him on the 5th of August, which brought away a confined motion.

On the 6th he had an injection, and again on the 8th.

Up to this time he remained about the same—that is, alternately cool and rather feverish, and the appetite but little impaired.

From Wednesday, July 27, he had one or two wet sheets applied twice every day—one sheet for a quarter of an hour and the other for half an hour. This cooled him, but he screamed and struggled against it so violently every time, that the sheet was with difficulty wrapped around him. Every time after the application of the sheet he was put into a bath of water, the chill of which was just taken off. He screamed all the time he was in the bath, and struggled most resolutely, especially when the water was poured on his head, so that he was with difficulty kept in the water. He was in each bath from five to ten minutes. This process was continued till August 16th. For the last four days he became much weaker; a nervous terror came over him, and the sheet and bath became more frightful to him. From the 6th of August till the 13th there was no motion from the bowels, and the water-doctor said it was of no consequence, as he took but little, and that it was all absorbed, consequently *there was nothing to come away.*

On the 12th of August pain in the bowels came on, and increased in violence on the 13th; when he had an injection given him, which operated, and he had another in the evening.

During this day, the 13th, the bowels were moved seven times, and an immense quantity of hard motion passed away, and there was considerable pain in the bowels. All this time the wet sheet and bath were continued twice a day.

On the 14th he was pretty quiet, but on the 15th and 16th he suffered great pain in the bowels, and was a little feverish at times, and then cool.

A glyster was administered to the child on the evening of the 15th of August, and again on the morning of the 16th; after which, on the same day, in consequence of the earnest entreaties of the mother, two teaspoonfuls of castor oil were given to him. This produced several bilious motions.*

On the evening of the 16th of August I first saw the little patient, who was then certainly in a very pitia-

* In order to secure accuracy in detail, I have taken down the case so far from the dictation of the parents of the child.

ble state. I never in my life saw distress more strongly depicted on any countenance. A nervous terror appeared to have seized him, and when I went near him he screamed loudly, and subsequently when I was sitting by him, and some water in a tub near him was moved, he dreaded being put into it so much that I thought he would have been seized with convulsions. When he became a little composed I examined him carefully, and found the pulse very quick, the tongue coated, and several of the papillæ red and elevated; the skin was hotter than natural, and dry; the abdomen was rather full and tender; a motion which had passed from him during the day was bilious, and rather relaxed and mixed with some mucus.

I recommended for him a powder consisting of *hyd. c. cretâ*, Dover's powder, and rhubarb, to be taken at bed-time, and a mixture of sweet spirits of nitre (Minderus' spirit) and camphor julep to be taken every four hours, and to be sponged with vinegar and water whenever the surface was hot.

On the 17th of August I found the patient better. He had slept a little during the night, and was altogether more composed, although still under great apprehension; the pulse was quieter; the tongue rather cleaner; three evacuations had passed from the bowels, which had a bilious appearance; the abdomen was not so full, and was less tender when pressed upon. The powder was repeated at bed time, and the mixture every four hours; the sponging also was continued.

On the 18th the child was improved, but still was in a very nervous and excitable state; the pulse continued quiet, and the tongue furred; the appearance of the motions was more natural; he continued the mixture, and omitted the night powder.

I do not feel it necessary to continue the daily reports of the case, as in a few days the child became convalescent, and, although so reduced in flesh and strength as to be unable to move, yet no untoward symptom occurred, and very little aperient medicine was required. The child was, however, so far an invalid as to require my daily attendance for three weeks, as the mucous membrane of the stomach and bowels remained in a very irritable state, and the motions were unnatural, and mucus was mixed with them. A mixture of sesqui-carbonate of soda, infusion of rhubarb, and camphor julep appeared to be useful in this respect, and succeeded in relieving the mucous membrane, and keeping the bowels regular. As, however, the symptoms subsided, and the only remaining uncomfortable circumstance was an unnatural acid smell in the motions, I ultimately recommended ten drops of Brandish's alkali to be taken in decoction of liquorice three times a day, and this seemed to act favorably in improving the condition of the digestive organs. I may further remark, that during the progress of recovery great attention was paid to diet, and after the appetite became considerable, which it did as the child became convalescent, great care was taken not to allow too much food to be eaten.

On the 7th of September the child was so far recovered as to be taken a journey into Shropshire, and I saw the child again on the 15th of September, when he had nearly recovered his flesh and strength, and appeared to be well in every respect.

REMARKS.

1. The cold water system was fairly tried for fourteen days in a very simple form of gastric derangement, and completely failed; for at the end of fourteen days the child was so weak and emaciated, and in such a state of nervous terror, that in all probability had the plan been followed out for a much longer time, in conformity with the water-doctor's wishes, some serious result would have happened; and it must not be forgotten that in this very case the water-doctor assured the friends that his system would cure the patient in two days.

2. The nervous terror produced on the child, by persevering in the wet sheet and bath against his wishes, was in itself calculated to do mischief, and to retard recovery; indeed, in a child of so susceptible a nervous system, it might have produced convulsions; so that the water cure is not in all cases the *safe* remedy it is represented to be; besides which, the circumstance of allowing seven days to pass by without an action of the bowels was very injurious to the patient; and the ridiculous remark, that the contents of the bowels would all be absorbed, could not fail to be remembered by the parents, and to open their eyes to the deception that was being practised upon them; for soon afterwards a large quantity of solid fæces was discharged from the bowels.

3. There is every reason to believe, from the ready manner in which the symptoms gave way to mild treatment, that if the child had, in the first instance, been treated by mild alteratives and aperients, it would have speedily recovered, instead of having to endure an illness of five weeks' duration.

4. May we not hazard an opinion, that if death had occurred in this instance, from the very injudicious use of the water system, a jury of upright and honest men might, in the faithful discharge of their duty, have brought in a verdict of manslaughter against the author of this suffering and untimely death?

It will not, of course, be supposed from the foregoing remarks, that I, in any way, intend to deny the efficacy of water as a remedial agent in the cure of disease. The history of medicine, from Hippocrates downwards, teems with facts illustrative of its beneficial agency. It is only the monstrous doctrine of the hydropathists, that water should become a *substitute* for all other remedies, that these remarks are intended to controvert. That it is an important *adjuvant* to other remedies no reflecting physician ever dreamt of controverting. The application of cold and warm water in almost every form of disease is a practice so common, that one cannot for a moment conceive how the claim of novelty can be set up for it by the most ignorant pretender. Let any sceptic upon this point take the trouble of referring to the works of Van Der Heyden, Floyer, Hancocke, Wall, Currie, Kinglake, and Macartney, and his doubts will very soon be resolved. In short, if he be honest and really desirous for truth in his inquiry, he will be very apt to come to the conclusion that all that is new in the dogmas of this modern empirical sect is not true; and all that is true is not new.

Worcester, September 17, 1842.

CASE
OF
SCIRRHO-CARCINOMATOUS TUMOR
IN THE
POSTERIOR MEDIASTINUM,
NOT DETECTED BY AUSCULTATION OR PERCUSSION.

By William England, M.D., Wisbech.

Jane Benn, aged seventy-four, a respectable unmarried woman, formerly a domestic servant, had been under the care of Mr. Weatherhead, of Wisbech, in July, 1840, for symptoms of an anomalous character, the more prominent of which were—constant pain in the direction of the spine in a line with the inferior edge of the scapulæ, accompanied with a feeling of great heat, described as extending from the epigastrium over the right hypochondrium to the point in the back where the pain was felt; a total loss of appetite, and general emaciation. These symptoms had existed for some months previous to her seeking medical assistance, with a hope of being relieved from the intolerable sense of heat before mentioned.

In August, 1840, at the request of Mr. Weatherhead, she sought my opinion, when the following were her general symptoms:—Considerable dyspnœa; pulse soft, regular, not quick; tongue red, rather dry, and shining; anorexia; general debility; complains of pain almost constant between the shoulders on a level with the inferior angle of the scapulæ, both when sitting up and lying down. The pain extends also to both hypochondria, particularly the right, and is accompanied with extreme tightness across the lower part of the chest. Excepting some enlargement of the liver, no tumor was perceptible upon examination of the epigastrium and abdomen generally, although she complained of morbid sensation in the epigastric and umbilical regions. She had suffered but little, if at all, from rheumatism; with palpitation of the heart and difficulty of respiration she had been affected for a considerable time; pulsation of the jugular veins at the lower part of the neck.

Percussion. — The natural resonance was heard throughout the thorax.

Auscultation.—Vesicular respiration audible in every region. The pulsation of the heart perceptible both by the stethoscope and the hand placed upon the epigastrium and left hypochondrium; the rythm quite regular; no morbid sound or murmur indicated the presence of valvular disease, though the impulse was rather more strong and laboring than natural over the inferior part of the sternum; the impulse of the apex heard as low as the cartilage of the seventh rib; although complaining of total loss of appetite, she could swallow liquid or solid food without any difficulty.

Diagnosis.—Cardiac asthma; dilatation of the right cavities of the heart; chronic gastritis.

Jane Benn derived some relief from the use of rhubarb and magnesia, the tongue becoming moister and less red; the emaciation progressed, and she died September 6.

Autopsy, September 7.

Thorax.—The ribs on each side of the cartilages soft enough to be easily divided with the scalpel; lungs collapsed, of a healthy cineritious color, crepitating throughout; no fluid, liquid or aeriform, in the cavities of the pleuræ; pericardium not distended; no adhesions, nor effusion; the heart in a lower position than natural; no valvular disease; right cavities dilated, the substance of the heart generally attenuated, being about two-thirds of the usual weight; behind the heart was a hard tumor, about five inches in length and two in breadth, descending posterior to, and closely connected with, the external coat of the aorta, commencing just below its arch; the inner coat of the artery was quite healthy; the external coat inseparably involved in the tumor, which, on being divided by a longitudinal incision through the artery, proved to be of a hard, fibrous, scirrho-cartilaginous structure; the weight of the tumor was about four ounces, two-thirds the weight of the heart; the bronchial glands were much enlarged, and of a black color.

Abdomen.—Beneath the peritoneal surface of the intestines generally were black, isolated, tumefied points; liver much hypertrophied; near the edge of the right lobe was a hard, round, white tubercle, of the size of a marble; pancreas more than double its usual size, and indurated, its structure feeling like hard granules; spleen of larger size than natural; with a hard cartilaginous investment upon half its superior surface connected with its fibrous envelop, and presenting a white shining appearance when cut into, and about one-eighth of an inch in thickness; stomach vascular, of a dull slate color, its mucous membrane exhibiting the appearance of chronic inflammation, with softening; attached to the mucous membrane were several remarkable pendulous prominences, more like local hypertrophies of the membrane than enlargement of the mucous glands; uterus atrophied, its lower portion somewhat scirrhous.

REMARKS.

This case is remarkable for the peculiar structure of the tumor discovered in the posterior mediastinum. Tumors in the anterior mediastinum and aneurisms of the arch of the aorta may press upon the heart and displace it downwards. Dr. Copland states that cases of this kind have been recorded by Lancisi, Morgagni, and Otto. The existence of a cancerous diathesis in this case is evidenced by the upper portion of the fibrous tunic of the spleen being degenerated into scirrho-cartilage; the softness of the ribs—with the numerous black points in the sub-serous cellular tissue of the stomach and intestines, as well as the black color of the bronchial glands—would seem to show some concatenation of morbid appearances, tending to establish the opinion of many pathologists, that melanosis is a variety of the degeneration of tissue, commonly called carcinoma. MM. Breschet and Ferrus in the Dictionnaire de Medecine (Art. Cancer), have noticed the rarity of the cancerous degeneration of the spleen, even when the stomach and liver have been seats of the disease. In the carcinomatous diathesis, although the bones are altered in structure, the pancreas and spleen have both been found in a normal state. With regard to the pancreas, however, its enlargement is thus described by these pathologists:—"Il n'est pas cependant rare de rencontrer le pancreas endurci et quelquefois *double de volume*; mais ici son organisation est constainment resteè la meme, et n'a ancun trait de squirrhe; c'est un espece d' infiltration sereuse du tissu cellulaire ou sont plonges les grains glanduleux." Whether the deposition of the

elements of the mediastinal tumor took place primarily into the cellular tissue covering the vertebral column, or whether the cellular external coat of the aorta was the starting point, must be a matter of conjecture. The attenuation of the heart shows the influence of the disease upon its nutrition. The impossibility of detecting a tumor of this size in the mediastinum during life renders the difficulty in this case analogous to that experienced in cases related by Stokes, Hope, Andral, &c., in which the cause of the anomalous symptoms remained a mystery until revealed by post-mortem examination.

Wisbech, September 17, 1842.

ABSCESS OF PHARYNX, SIMULATING CROUP.— PHLEGMONOUS ABSCESS OF LUNG.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen, — Of all classes of disease that fall under the care of the medical practitioner, none more particularly claim his attention than those involving the functions of the respiratory organs. The two following cases selected from my case book, appear to be not of common occurrence. Should your deem them of sufficient practical importance to deserve publicity, you will much oblige me by inserting them in your valuable Journal.

I remain, Gentlemen,
Your obedient servant,
W. C. Worthington,
Senior Surgeon to the Lowestoft Infirmary, and Fellow of the Royal Medical and Chirurgical Society.

Lowestoft, September 16, 1842.

Case 1.—The subject of the following case was a female infant, nine months old. I was first consulted April 1, 1841; the mother informed me the child had been indisposed five days previously, from slight fever accompanied with hoarseness and crying; these symptoms were treated by a druggist for a supposed catarrhal affection, but as they continued to increase, the mother was induced to seek further advice.

Present Symptoms and Treatment.

Great restlessness; countenance expressive of suffering; cheeks and lips somewhat livid; dyspnœa; respirations 30 in the minute, each inspiration being accompanied by a crowing or shrill hissing noise; slight cough, with scanty expectoration; pulse frequent, contracted, sharp, and small; deglutition slightly affected. Upon a primâ facie view of the symptoms, I was inclined to regard them as diagnostic of croup, and prescribed emetics, antimonials, and frequent doses of calomel. In spite, however, of these remedies, the symptoms increased, the dyspnœa became more distressing, and the loud shrill noise, so peculiarly characteristic of croup, continued until a short time before death, which took place on the 4th day from the time I was consulted.

Post-mortem Examination.

The muscles of the face and neck generally presented a puffy and bloated appearance, but no obvious indication of circumscribed swelling. In the act of separating the pharynx and œsophagus from their posterior attachments, for the purpose of submitting them to a careful investigation, the scalpel unexpectedly penetrated a sac, from which issued a stream of well formed pus. At the moment I apprehended the case to have been one of abscess, caused, probably, by some extraneous body lodged about the pharynx, and thereby giving rise to inflammation and suppuration, the matter having insinuated itself behind that organ. This, however, proved not to be the case; a further examination discovered an encysted abscess, situated between the cervical vertebræ and pharynx, extending some way down behind the œsophagus, and which, from its pressure, no doubt produced the difficulty of breathing and other symptoms resembling croup. The cyst was about the size of a pullet's egg, capable of containing at least an ounce of pus, and seemed only prevented from forcing its way into the pharynx by a thin partition wall, which constituted its upper and anterior boundary. No traces of disease were discernible in either the larynx or œsophagus, which were carefully preserved with the attached cyst. On viewing the preparation on its upper and anterior aspect, it appeared that a lancet might easily have been made to enter the cyst through the pharynx, had an abscess been suspected. Dr. Copland, in his Medical Dictionary, under the article "Difficult Deglutition," states, that both himself and Mr. Carmichael have met with purulent collections between the trachea and œsophagus; but no allusion is made to primary abscess behind the pharynx or œsophagus. Abscess, in connection with caries of the cervical vertebræ, is not, of course, of uncommon occurrence.

Case II.—October 23, 1841. I was requested to visit Mrs. Norton's child, a fine boy, three years old, who had, a few days previously, fallen down stairs, and was supposed to have injured his shoulder. Upon a careful examination of the joint, no displacement was found to have taken place, nor was any external mark of injury discoverable; slight pain, however, was produced by pressure, as also upon any movement of the arm.

26. Since my last visit the child has become feverish and restless, with loss of appetite. On again examining the shoulder-joint, my attention was directed to a fulness which began to develop itself below the right clavicle, originating apparently under the pectoralis muscle; it was somewhat tender to the touch, and of a moderately soft doughy feel. The swelling at this period was regarded as the consequence of a supposed contusion. Leeches were applied, and the affected part afterwards kept moist by a cold lotion.

30. The feverish excitement has increased, and the countenance presents an appearance of suffering. For the first time a slight cough was observed; the breathing was somewhat oppressed, and the respiratory murmur rather less distinct than on the left side; but as the other pulmonary symptoms were so feebly developed, the obscurity was considered as depending principally upon the external swelling, which, by this time had much increased. Considerable doubt existed in my mind as to its exact nature. I imagined it not improbable that it might be owing to the rupture of a blood-vessel, caused by the fall, giving rise to extravasation, having before observed the same appearance produced by contusion. Aperient medicine was prescribed with salines, and the cold lotion continued.

November 1. The intumescence extends below the nipple, reaches into the axillæ, and ascends above the clavicle. A distinct fluctuation can be felt; no apparent increased difficulty of breathing or aggravation of cough; can lie upon the affected side, but appears most easy when nursed in the erect position.

3. The swelling has attained the size of a large orange, pointed with a blush of redness on its surface. The parents object to its being punctured.

5. Permission was obtained to make an opening. Even at this juncture the symptoms were not supposed to have any connection with the thoracic cavity. A puncture having been made at the most prominent part, not less than fourteen ounces of well digested pus readily followed, when the little patient became suddenly seized with the most distressing dyspnœa and suffocating cough, which continued several minutes, and seemed, for the time, to threaten death. Concurrent with every respiration a rush of blood of a bright scarlet color, mixed with bubbles of air, escaped from the wound. On applying the ear to the chest, a deep cavernous rattle could be heard, and a very singular movement of the parietes of the affected side of the thorax was observed. On every attempt to breathe, which was performed by a kind of convulsive effort, I could compare the movement to nothing better than the flapping action of the valve of a common pair of bellows. This continued until the puncture was closed, and a linen roller passed several times round the chest. No doubt any longer existed as to the exact nature of the case, masked as it had been in its first stages by an almost total absence of symptoms indicative of any acute pulmonary affection. The patient was ordered to bed, the shoulders to be kept elevated, and strict quietude enjoined. Diet to consist of light animal broth.

8. Considerable relief followed the puncture, which was now repeated, and about two ounces of pus evacuated, mixed with frothy blood; the same flapping action of the parietes of the chest followed, together with the suffocating cough and dyspnœa, but marked with a less degree of intensity. On closing the aperture and reapplying the bandage, these symptoms subsided, and the patient was again placed quietly in bed.

At the end of two days the puncture was repeated; a small quantity of pus followed; the flapping action and cough ceased. From this time only a slight exudation of sero-purulent fluid took place from the opening, and the fulness had nearly disappeared. The health gradually improved. At the end of three weeks from the last time the abscess was opened, the patient was enabled to take exercise in the open air, and gradual restoration to health took place. The chest, when examined, at this time elicited rather a dull sound on the diseased side, and the respiratory murmur was less perfectly developed. The respiratory functions, however, in all other respects appeared to have but slightly suffered.

Abscess of the lung, as a product of simple phlogosis, may be regarded as a rare occurrence. Dr. Elliotson observes, that he does not recollect above twice seeing an abscess in the lung resulting from inflammation. Laennec says, that amongst several hundred dissections of pneumonic subjects, he did not meet with a collection of pus in an inflamed lung more than five or six times. The reason assigned is, that the disease is either cured by art or destroys life before it proceeds to the length of destroying the pulmonary tissue—that death takes place before the disease advances so far as for matter to be found in the lung in an abscess.

DRY TAPPING.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—A case of tapping for dropsy, which was published in the "Provincial Medical Journal" for September 3, 1842, by Mr. Storrs, of Doncaster, reminded me of a case of apparent abscess situate just over the stomach and right lobe of the liver.

A middle-aged, married woman (who never was pregnant) had suffered under a long illness from dyspepsia, when a very hard swelling appeared in the above-named situation, which gradually increased to a large size, and became so extremely inconvenient as to confine her to her bed.

After poultices had been applied some days, the swelling appeared to be a little reduced in size, and it felt softer, as if some of the matter had been absorbed and the sense of fluctuation had become more evident.

My partner (Mr. W. Mee) and I were not very positive about the propriety of plunging an abscess lancet into the swelling; however, as the constitution was disturbed, and as emaciation was the consequence, we determined upon making a puncture, having first told her friends that, although they must not be surprised if she died soon after the swelling was emptied, yet that the operation appeared to be the only means of saving her life.

After a lancet had been pushed in we found no matter!—but a great quantity of extremely offensive gas, which escaped with a loud hissing noise. The swelling gradually and entirely subsided; but, although the woman was pleased on feeling such immediate relief, and, although her friends expressed much satisfaction on the subsidence of the swelling, we (doubting whether or not the cyst communicated with the lungs, stomach, or gall-duct) left the cold poultice over a bit of lint, upon the orifice, to wait the issue. On calling the next day, the woman was sitting up below stairs, and she observed that "she got into bed expecting she had not long to live, but as the swelling was all gone away, she thought she might as well get up and attend to her household affairs.

She gradually recovered from that time, and is now living in good health, in Redford. I have twice tapped for dropsy, when the cyst has contained a jelly-like substance (in consistence), which would not pass through the canula, although I worked about a long probe through it; but on both occasions, after having let in air, a large quantity of fluid escaped during the next twenty-four hours. The size of the abdomen in that case was not satisfactorily reduced.

I am, Gentlemen,

Yours very respectfully,

W. Allison.

September 15, 1842.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, SEPTEMBER 24, 1842.

The question of assurance office fees was briefly considered at the late anniversary meeting of the Provincial Association. The point debated was the long-contested one whether the medical referee should be paid for his certificate by the assurance office, or by the person who applies to the office for the purpose of effecting an insurance on his life.

The Association, wisely we think, declined pronouncing any decided opinion on the subject, although the majority of those who addressed the meeting declared, in explicit terms, their conviction that the fee should be paid by the party who seeks to effect the policy—not by the office to which application for insurance is made.

We have considered this question with some care, and do not hesitate to pronounce in favor of the assurance companies. That the medical referee should receive adequate remuneration for his trouble, and the responsibility which he assumes in furnishing a certificate of health, is just and reasonable. So far there can be no doubt. But from whom should the remuneration come? From the party by which the medical referee is employed. Herein lies the whole question, and the slightest reflection must show that the employer of the medical referee is the person who *refers* to his ordinary medical attendant, as the one best acquainted with his constitution, and best capable of affording information with respect to his past and present state of health.

The assurance company requires a certificate of health from the applicant before entering into any contract with him; and the person seeking to insure his life must obtain this certificate in the best manner he can. The only circumstance which gives a shadow of reason to those who argue against the companies is the fact of the blank report being forwarded from the office, and not from the individual. But this is a matter of arrangement, which does not alter, in the slightest degree, the nature of the question. The blank reports are furnished *by* the company, because they contain an enumeration of the points on which information is required from the applicant; and they are returned *to* the company, because, truth being sometimes disagreeable, the applicant might not relish a true description of the contents of his different cavities.

One of the arguments sometimes employed during the discussion of this topic rests on the idea that life assurance companies could not conduct their affairs without the assistance of medical referees. Under a proper system this may be the case, but under that pursued by the great majority of companies at the present day, the value of a medical opinion, however correct and conscientious, is very small indeed. Upon this point we shall make a few remarks.

In the business of life assurance one party, the company, is placed under an obligation to pay a definite sum of money upon the death of an individual named, or upon that individual attaining a certain age, in consideration of the other party paying periodical premiums until that event shall occur. The question, and the only important one which the company has to consider in entering into that contract, is the likelihood of the party attaining such an age, as will enable them to receive in premiums sums commensurate with the amount assured; and no one pretends that a faithful medical opinion is not of great value as an assistance in arriving at a right conclusion upon that subject. No life company grants a policy without first forming an opinion upon the state of health of the person upon whom the assurance is to be effected; and hence it is assumed by those who argue in favor of the medical profession, and it is not disputed by the champions of the non-payment offices, that correct medical reports are of great value to life companies.

Many persons, and members of our own profession in particular, imagine that the medical man is the "guardian angel of life companies;" and undoubtedly it would be so—it would be impossible to overrate the value of conscientious reports from medical men, or to estimate the mischief that might ensue from reports of an opposite description, if life companies were conducted upon the principles just noticed, and which are generally supposed to regulate their practice. There is, however, a subject of vital importance to the assured, which is never referred to by those who maintain that the companies should pay medical fees, and persons contending against the propriety of paying fees have evinced considerable ingenuity in so running their line of argument as to prevent their opponents discovering the true cause of their unwillingness to pay for medical reports.

It is said that it is the duty of the proposer to come prepared with a favorable opinion from his private medical adviser, and that the fact of the company paying the fee would preclude them from afterwards obtaining the evidence of the gentlemen so remunerated by the company. Neither of these is the true reason. It is to be found in the fact that life companies frame their contracts or policies in such terms as to be binding upon the assured, and at the same time loose, ambiguous, and open to many objections on the part of the company. The medical profession is not the "guardian angel of the companies" when the contract is to be entered into, and when the question of pay or no pay is to be determined. It is of no importance to the company whether the medical reports be conscientious and correct, or the reverse. If the

life assured turn out to be one of short duration, and the company imagine it to be for their interest to refuse payment of the claim, the more incorrect the report the better for the company. This arises from the unfair nature of the contract which is entered into between the company and the assured. The person proposing an assurance is called upon in the first instance to answer a number of questions touching his age, past residence, health, habits, relatives, health of relatives, medical adviser, &c. The medical adviser again is put to his interrogatories, and having been referred to by the proposer, it is held that his answers (although they are never seen by the proposer) are the proposer's answers; and the contract or policy is so framed that if there be any error or omission, whether intentional or not, innocent or fraudulent, in any of the answers to those several sets of questions, the company may keep the premiums which they have received, and successfully resist payment of the claim. That companies should, under these circumstances, feel very little anxiety about the medical report is not surprising. Why should they pay to obtain a faithful report, when an inaccurate, incomplete, or fraudulent one may turn out to be the better suited to promote their interests? We do not mean to state, for we do not believe it to be the fact, that there is any life company who purposely and of design endeavor to obtain false documents or reports with the view of relieving themselves of just obligations which they have undertaken; but it is too obvious to admit of dispute, that if an advantage is to be obtained by mistakes committed by others, it would be expecting too much of human nature to suppose that vigilant care will be exercised by the parties who may profit by those errors to see that none are committed; and the practice of offices we believe to be this, that the offices and directors satisfy themselves that the life proposed is tolerably good, which they do by personal observation, or by reports from their agents or their own medical advisers; they pay little regard to the report of the party's own medical adviser, or the statement of his friends, but retain those documents to be minutely scrutinised and compared in every particular with each other, and with the party's own statement, when a demand for the debt comes to be made.

That we have fairly stated the nature of the policy or contract of assurance between the assurers and the assured, may be seen by examining any of the cases which have been argued in the courts of law, upon the grounds of mis-statement, concealment, or error. At first sight it would not be easy to imagine that a policy could be vitiated, or that a court of law would deprive a creditor or a dependent family of a sum of money purchased by a long succession of yearly payments, upon the mere ground of an *unintentional* omission or an *innocent* mistake, committed by the original contractor, or his doctor, or his friend, or a parish clerk; but such is the rule well known to insurance companies, and confirmed by many judicial decisions.

The rule is distinctly enough laid down by the West of England Company, in one of the conditions of their policies. They state, "The party proposing the same—viz., the assurance—is required to sign a declaration, setting forth the residence, occupation, age, and place of birth of the person on whose life the insurance is proposed, and *other particulars*, with reference to his or her state of health and habits of life, which declaration will be taken to be the basis of the contract between the assured and the company, and be inserted by way of *warranty* in the policy, and the insurance will be valid only in case such declaration, and all testimonials and documents addressed to or deposited with the company, in relation to the insurance, shall be found to be in all respects true, and to contain a faithful disclosure of every circumstance to which they may relate, or material to be known to the company."

The same rule is made to apply to the policies of all other companies with which we are acquainted, with the exception of one, to which we will immediately refer. But duly to estimate the effect of that and similar clauses, we must understand the legal import and construction of the term "*warranty*," which is employed in life assurance contracts. If a material circumstance have been knowingly misstated or concealed from the company, the policy is void, and a claim for the contents of it would be untenable, and such would naturally be expected; but, in a case of *warranty*, immateriality and innocence avail nothing. Marshall, on insurance, states, "The very meaning of a warranty is to preclude all question whether it has been substantially complied with or not—whether the thing warranted was material or not—whether the breach of it proceeded from *fraud, negligence, mis-information*, or *any other cause*. The consequence is the same; there is no *latitude*, no *equity*." Lord Eldon, in delivering a judgment, states, "If there is a warranty, it is part of the contract that the matter is such as it is represented to be. Therefore," he adds, "the *materiality* or *immateriality* signifies nothing. The only question is as to the mere fact." And Lord Lyndhurst says, "I do not choose to use the word *concealment;* the non-communication of a material fact, *whether fraudulent or not*, will affect the policy."

Such is the established rule of practice and of law; and having at command such a mighty engine of defence against almost every claim which a company may think proper to dispute, it will not appear to be wonderful that they should be unwilling to pay one guinea to obtain a report, which in proportion as it is carefully, cautiously, and conscientiously prepared,

may, to that extent, be useless to them when they come to be called upon to obtain a defence.

In confirmation of these views, we may mention that the only company which follows a different rule in the construction of their policies, pay full fees to medical gentlemen. The London, Edinburgh, and Dublin Company, which was instituted in 1839, give a fee of one guinea for every report, whatever may be the amount of the sum assured. In their printed instructions, their agents are directed to pay that amount of fee in every case; and the reason of the company adopting that rule is, because they proceeded upon a totally different principle from any other company in their contracts with the assured. The officers of that company make the necessary inquiries of the private medical adviser and a friend who is referred to; but, unlike other companies, the London, Edinburgh, and Dublin take upon themselves the responsibility of those inquiries, and by a special clause in their deed of constitution, bind themselves and their successors to give full effect to every policy which is issued from the office. The clause is in the following terms:—

"Clause 78. That every policy issued by the company shall be indefeasible and indisputable, and the fact of the issuing of the same shall be conclusive evidence of its validity; and it shall not be lawful for the company to delay payment of the money assured thereby, on the ground of any error, mistake, or omission, however important, made by or on the part of the person or persons affecting the same; and that, on the contrary, the amount receivable under the same, shall be paid at the time stipulated by the policy to the person entitled thereto, as if no error, mistake, or omission had been made or discovered, unless the policy shall have been obtained by fraudulent misrepresentations."

Unless, therefore, this company is, in a situation to prove to the satisfaction of a jury, that the policy has been obtained from them by "fraudulent misrepresentations," they must pay the claim; and thus, being the only company who take upon themselves the responsibility of the inquiries, they are also the only company who remunerate medical gentlemen to the extent to which they are entitled.

ACADEMY OF MEDICINE, PARIS.

September 13, 1842.

EXTIRPATION OF THE PAROTID GLAND.

A man, sixty-two years of age, had a tumor in the region of the parotid gland for the last twenty years. During the last six years it increased rapidly, and became as large as a hen-egg; the tumor now ulcerated, and discharged an ichorous fluid; it was the seat of lancinating pain, and presented all the characters of a cancerous tumor. As it was judged necessary to extirpate it, M. Lusembert passed a ligature round the primary carotid; two semicircular incisions were then made over the diseased mass, and the whole separated from the deep-seated parts. On removing the tumor, it proved to be the parotid gland converted into encephaloid matter. Copious hæmorrhage set in towards the end of the operation, and it became necessary to tighten the temporary ligature of the carotid, by which the bleeding was instantly arrested. The seventh nerve had been divided during the operation, and the result was paralysis of the side of the face.

TREATMENT OF ANEURISM BY BRASDOR'S METHOD.

M. Diday read a memoir on the rules which should guide the surgeon in applying this method to the treatment of aneurism of the innominata or its branches near their origin. The following are the conclusions of the author:—

1. Whenever it is possible to ascertain that the innominata is implicated, we should tie the subclavian and carotid arteries. Experience proves that the ligature of either of those vessels alone is insufficient.

2. Ligature of both the carotid and subclavian, at the same time, is decidedly the most active method of treatment. It is much less dangerous than has been said, and we know that it does not prevent the establishment of the circulation in the superior extremity. Inflammation of the sac and secondary hæmorrhage are the accidents which, theoretically speaking, we have most to dread.

3. When we decide on tying the vessels successively, and one of the branches of the innominata appears to be obliterated, we should commence by taking up the other.

4. But in this case it is of the utmost importance to distinguish real obliteration of the artery from the partial closure produced by pressure of the sac. In the former case we may proceed confidently to the ligature of the remaining vessel; but, in the latter, experience has shown, on three different occasions, that the mere absence of pulsation in the artery is no proof whatever of its obliteration.

5. When both arteries appear to be equally permeable, it is not easy to decide on which should be tied first. We should principally be guided by observing the direction in which the tumor extends and the effects of pressure on the two branches. Should a doubt still remain it is better to commence with the carotid. Experience is in favor of this practice; besides, statistics show that ligature of the carotid is exactly *one half* less dangerous than ligature of the subclavian or axillary arteries.

6. As a general rule, the second artery should not be taken up until the first operation has ceased to produce any effect on the aneurismal tumor. If the latter, for example, ceases to diminish in size, or if pulsation recommences, we should without delay take up the second vessel.

7. After ligature of the carotid, in Brasdor's method, hæmorrhage from the wound has been observed in two cases only; in both it took place from the superior extremity of the artery, and in both was probably occasioned by the ligature having been placed too near the bifurcation of the artery.

8. Disease of the parietes of the artery appears to be as frequent towards the bifurcation as near the origin of the carotid, and hence the ligature should never be placed too near either of these points.

ST. VINCENT'S HOSPITAL, DUBLIN.

ANEURISM OF THE EXTERNAL ILIAC ARTERY—LIGATURE OF THE VESSEL CLOSE TO THE BIFURCATION OF THE COMMON ILIAC ARTERY.

Matthew Daly, aged thirty-two, a slender and healthy man (in other respects) was admitted into St. Vincent's Hospital, August 18, 1842, under the care of Mr. Bellingham, laboring under aneurism of the external iliac artery on the right side. He has never suffered from any illness of consequence; had been in the habit of drinking, but has given it up for the last two years. He is a brush-maker by trade, and his occupation consists in constantly turning a lathe with the right foot. He continued to work until three or four days previous to his admission, under the impression "that the disease would wear away."

The aneurism is of about three months' duration. His attention was attracted to it by the swelling, which at that time (he says) pulsated strongly. It was, however, quite unattended by pain, and it has increased slowly in size. Recently, he has begun to suffer pain of a dull, aching kind in the part, which obliged him to give up work, and to seek admission into hospital. He has never received any injury in the part, or ever strained himself, that he recollects.

The aneurismal tumor is about the size of a moderately-sized orange, but more oval in shape, seated above Poupart's ligament, and extending about half an inch below it. A very strong impulse is communicated to the hand placed on it, but no fremissement. Immediately below Poupart's ligament, however, there is a slight fremissement, and on applying the stethoscope a loud single bruit is heard. There is no swelling or œdema of the foot; the circulation is perfectly regular and tranquil, and the heart's action natural.

In consultation with Sir Philip Crampton and Mr. Cusack, it was determined to place a ligature upon the common iliac artery on the right side; as it was supposed there would not be found sufficient room between the aneurism and the division of the common iliac, the external iliac being probably diseased above the aneurismal tumor.

A purgative draught was given on the night before the operation, and a cathartic enema administered the following morning, by which the bowels were well cleared out; an hour before the operation the patient took forty drops of laudanum.

The patient being placed on his back, slightly inclining to the sound side, having the thorax elevated, and the thigh bent upon the pelvis, Mr. Bellingham commenced the operation (assisted by Sir Philip Crampton, Mr. Cusack, and Professor Porter) by a semicircular incision, beginning on a line with the last rib, and terminating nearly opposite the anterior and superior spinous process of the ileum, and about an inch and a half internal to this process. Its length was about five inches, and the concavity towards the umbilicus; by this the integuments and superficial fascia were divided; the fibres of the external oblique muscle were then incised in the same direction, and next those of the internal oblique, by which the transversalis muscle was exposed. A cautious incision was made through the fibres of this muscle at the lower part of the wound, and a director endeavoured to be introduced under them. This muscle, however, was found to be considerably hypertrophied, being double or treble its natural thickness. On arriving at the transversalis fascia, it also was found to be increased considerably in thickness, and presented almost a tendinous character. A portion of it was raised with a forceps, and cautiously incised; a director was then introduced, and an incision made sufficient to admit the finger, upon which this fascia was divided by a probe-pointed bistoury, both upwards and downwards. No artery was divided in this part of the operation requiring a ligature; the bleeding appeared to be altogether venous.

The peritoneum was now very cautiously raised from the subjacent iliac muscle by insinuating the fingers behind it, and this proceeding appeared to give much more pain than was expected. As the peritoneum was detached, Mr. Porter, with his hand in the wound, drew this membrane and the intestines towards the opposite side; the separation of the peritoneum was continued until the finger reached the upper extremity of the external iliac artery; and the expected difficulty from the protrusion of the intestines was much less than had been anticipated. After a short time Mr. B. succeeded in getting a view of the vessel, and, as it appeared to be perfectly healthy, its sheath was opened to a small extent, by means of the blunt extremity of a director; and Mr. Trant's aneurism needle was then passed under the artery, from without inwards, without much difficulty; and here the advantage of his instrument was fully proved, for as soon as the eye of the needle appeared at the opposite side of the vessel, the ligature was drawn up by it, which, owing to the depth of the wound, and the distance of the artery from the surface, must have been attended with delay and difficulty, if the common aneurism needle had been employed. A single silk ligature was used, and as soon as it was tightened the pulsation in the aneurism ceased. The edges of the incision were then brought together by the interrupted suture and adhesive plaster; the patient was placed in bed, and took sixty drops of laudanum. The operation was completed in less than thirty-five minutes.

Eight o'clock, p.m. Reaction has completely set in; both lower extremities feel warmer than natural; he has a little thirst. Pulse 80, and has had some sleep since the operation.

August 27. Slept well last night; no pain anywhere except in the wound; no tenderness on pressure over the abdomen; no sickness of stomach; some thirst; wishes for something to eat; pulse 72; temperature of the ham, on right side 80, on left 90.

28. Did not rest quite so well last night; was annoyed by distension of the abdomen from flatulence, which occasionally gave him pain; pulse 76; no thirst, nor pain on pressure over any part of the abdomen; the aneurismal tumor appears to be somewhat diminished in size.

29. Pulse 72; slept comfortably last night; feels hungry, and wishes for some solid food; temperature of both limbs similar. The wound was dressed today; the lower portion has united by the first intention; water dressings and adhesive plaster applied; sutures not disturbed. As the bowels have not been moved since the operation, a little castor oil was directed to be administered immediately, and repeated at intervals until it operated.

30. Bowels moved freely; feels more comfortable since; no tension or uneasiness in the abdomen; the aneurismal tumor appears to be more solid.

31. Wound suppurating freely; no thirst; appetite good; temperature of both limbs equal; pulse 80. Ordered some weak chicken broth.

September 2. He complained last night of pain over the middle sternal region, increased on inspiration. A mustard cataplasm was applied, and this morning the pain is much relieved; his pulse was slightly increased in frequency, about 88; in every other respect his condition is satisfactory.

5. The wound was dressed with charpie to-day; the discharge is abundant, and of a good quality; healthy granulations are springing up from the bottom; the upper and lower portion of the incision have united by the first intention; pulse regular; no thirst; appetite good; has eaten chicken for his dinner the last two days.

8. The wound has contracted considerably, and the discharge is diminishing; he sleeps well, and says he has not felt so well since the operation; no pulsation can be felt in the femoral or anterior tibial artery; he eats mutton chop for dinner with appetite.

13. (19th day.) The aneurismal tumor within the last day or two has become painful when pressed about the centre, and its contents at this point are evidently more fluid than before; he also suffers from a feeling of distension in the part, otherwise he is in very good health, eats his breakfast and dinner with appetite, and has been allowed porter for some days. The ligature is not yet loose, and it gives him pain when it is gently pulled.

15. (21st day.) To-day the dressings were found to be deeply colored with blood, and, on examination, a small orifice was detected at the inferior angle of the wound, through which a mixture of pus and blood could be squeezed. The aneurismal tumor is smaller and less tense, a portion of its contents having been evacuated in this way.

16. (22nd day.) The discharge of pus and blood continues, but in diminished quantity, and the aneurismal tumor is much smaller. The ligature was gently pulled to-day, when it yielded a little. This proceeding, however, caused apparently very great pain, which was referred to the hip.

17. A feeble pulsation detected to-day in the femoral artery high up in the thigh; none in the anterior tibial.

18. (24th day.) The ligature came away this morning without any pain, and was not followed by the discharge of a drop of blood. The wound is very much diminished in size, having filled up by granulation nearly to a level with the skin, except at the point where the ligature presented. His health is very good; he eats heartily, and sleeps well; the aneurismal swelling is diminished in size; but the integuments at one point covering it are discolored and thinned, and its contents at this part are very fluid.

APPLICATIONS OF BRAN DRESSING.

Dr. Reynell Coates has published some interesting observations on this subject, a portion of which we extract. Dr. J. Rhea Barton "was originally led to the employment of the bran in cases of compound fracture accompanied with extensive laceration, where an equable support without the uncertain pressure of bandages became a most important object. It is well known that such cases are peculiarly prone to produce mortification, and that any dressing offering the least restraint to the local circulation greatly enhances the danger. Rest—absolute rest—and not pressure, is the chief indication. But the swelling attendant on the subsequent inflammation inevitably occasions swelling; and the most cautiously applied bandage, however slight may be the restraint which it produces in the first instance, speedily becomes tightened by the increasing bulk of the parts, and undoubtedly promotes the occurrence of gangrene in many instances. It is chiefly for the purpose of readily adapting the dressing to this change in dimensions, and to accomplish this with the least possible agitation of the limb, that the bandage of Scultetus, or the less perfect ordinary bandage of strips is now almost universally preferred to the common roller in the treatment of compound fractures. But even the bandage of Scultetus cannot be applied without exerting considerable pressure, and thus enhancing, to a certain extent, the danger of mortification; while the gradual or more rapid exudation of blood from vessels too small or too deeply seated to be properly secured by ligature, moistens the strips, increasing the rigidity of the dressings, and frequently rendering it impossible to modify their action without agitating the limb in a painful and, it may be, dangerous manner. Again, when the laceration is extensive, this very exudation of blood from broad surfaces and minute vessels often endangers the life of a patient already almost in a state of collapse from the shock of the accident. It must be arrested—and this can only be accomplished by *pressure*. It is, therefore, of the utmost importance that we should so regulate this dangerous resource as to render its action as mild and as purely local as possible.

The first case in which Dr. Barton employed the bran dressing was of the character just described, and he observed that the blood escaping from the wounds gradually amalgamated the bran in the immediate neighbourhood of the injury into a soft, but solid mass, which, by its increasing extent, and its enlargement by the absorption of fluid, continually meets with more and more resistance from the dry bran which surrounds it, and consequently reacts directly on the wounded surfaces with perpetually accumulating force, until it arrests the hæmorrhage; when the process instantly ceases. Thus we have an exceedingly bland application—a mixture of bran and coagulated blood—acting in a manner purely local, without the slightest embarrassment to the general circulation of the injured limb, and one which cannot exert any degree of pressure beyond the precise necessities of the case.

It frequently happens, in the progress of reaction, that a hæmorrhage of this character is renewed by the returning vigor of the circulation. In this case the compress, if we may so style it, again becomes gradually enlarged, until the pressure is sufficient once more to check the flow.

This beautiful process has been very frequently employed by the able and ingenious surgeon with whom it originated, and always with the happiest effects.

We have spoken of the facility with which the bran dressing may be shifted to permit an examination of the injured parts; but, in extensive lacerations, such examinations should never be lightly made at a moment too early after the accident.

The limb being placed in a suitable fracture box, the broken bones adjusted, and an easy attitude secured, it should be covered completely, and to a considerable depth. It would then be folly to disturb the bran for several days, in consequence of any slight change in the position of the fragments (and a great one can never occur in a well regulated apparatus); for such changes are of very little importance during the first days of a severe compound fracture, and our interference would endanger the recurrence of serious hæmorrhage. When suppuration is fully established, such an accident, though not absolutely impossible, is extremely rare, because the wound is then completely covered with a new secreting membrane foreclosing the torn capillaries. Scarcely ever will occasion warrant an examination in less than four or six days, except when the occurrence of extensive gangrene is plainly indicated by the condition of the patient and the appearance of the limb at a distance from the seat of injury. Any accidental malposition of the fragments which can occur under skilful treatment, may be corrected after such an interval as readily as at an earlier moment."—*American Journal of Medical Sciences, No.* 6.

MEDICAL MEN AND THE INCOME TAX.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

Gentlemen,—I have read your correspondent's letter in your Number for the 3rd instant, respecting the opinion of some commissioners of taxes that medical men must not make any deductions for their horses and carriages (estimating their professional incomes), in case of their ever using them for any other purpose than that of visiting patients.

With becoming gratitude to the said commissioners, I should not think of troubling them for any advice upon the present occasion, but shall take the liberty of using my own judgment in interpreting the *spirit* of the act, and in estimating my actual professional income for the year 1841. Were I a carrier, or a brewer, I should not the less regard my horses as part of my necessary expenditure, because I occasionally used one for sending my family to church; and as I keep horses and carriages entirely for the purpose of carrying on my profession, I should not think of omitting to put them down, as items of unavoidable professional expenditure, in calculating the amount of my income. In making a distant professional journey, I might visit a friend on the way; but I should not, certainly, on that account, consider it unreasonable to deduct such travelling expenses from my annual receipts.

The return of my professional gains for the year 1841, is an affair between me and my conscience (not commissioners). I have presumed to decide for myself what the act requires, and have sent in such a return as I think to be a faithful one. If commissioners are dissatisfied, they may put me to my oath, and I will swear to my correctness; if my books are called for, they shall have them, and make them out how they can. I cannot, however, believe that the government will encourage the giving unnecessary trouble where no fraud can be supposed; "frivolous and vexatious" interpretations of the Property Tax Act in the present discontented state of the country with respect to that impost, would be rather a dangerous game.

I should like to know how far the London physicians and surgeons have complied with the commissioners' decision that they are to make no deduction for the expence of carriage and horses in their returns of income?

Yours, faithfully,

A Provincial Surgeon.

September 20, 1842.

TREATMENT OF FEVER WITH RHEUMATIC PAIN.

A lady of forty years of age, whose appetite led her to eschew wholesome joints and to eat largely of stews and other dishes in which fatty matters and pepper were constant ingredients, and who under the operation of this diet became very stout, very bilious, and very irascible, was seized, in the spring of last year, with severe rheumatic fever. I could never obtain any history that showed the exciting cause: the most usual one, as is well known, is the combination of cold and damp. To the ordinary signs of inflammatory fever were added, in this case, the symptoms of considerable disorder of the biliary organ: yellowness of the eyes, great bitterness of mouth, with a fevered and fiery-tipped tongue, yellow turbid urine, &c. There was also much tenderness over the region of the liver and pit of the stomach, and some nausea. The rheumatism was of the kind called "articular," and was more intense in the hands than feet.

The symptoms indicating acute inflammatory action in the stomach and liver, I first directed the application of eighteen leeches to the pit of the stomach, and then a poultice over the bites. A powerful enema of aloes dissolved in warm water, with an ounce of castor-oil, was next administered, and produced a copious purging of the lower bowel. The hands and feet meanwhile were wrapped in oil silk, and over that, with flannel. A small fire was kept in the room to render the temperature steady at about 65°. Cold water and soda-water were given frequently for beverage. Immediately after the leeching and enema I commenced giving her pills composed of rhubarb with minute doses of ipecacuanha, a combination that will be found to act upon the secretion of the liver quite as effectually as mercurials, and with less general irritation. Together with these, a mixture of solution of potass and camphor-julep was prescribed; for in this species of fever the perspiration, urine, and saliva, will be found invariably acid, and the use of alkalis beneficial after such indications. All these means were put into practice in the first twenty-four hours, with slight alleviation of pain. The latter, however, being still severe on the second day, and the evidences of considerable visceral irritation persisting, the abdomen was fomented with mustard and water, as in the

last case, for several hours; the purgative enema again used, and the other remedies continued. In the intervals of the fomentations a poultice of linseed-meal mixed with laudanum and hot water was applied over the whole abdomen. Gradually the pulse gave way in strength, and as this proceeded, the articular pains began to relax in intensity, leaving one hand or foot for twelve or eighteen hours, and then returning with diminished amount, some other limb being then relieved. All this time the pained parts were maintained in a steady and high temperature by the oil-silk covering. The whole body perspired profusely; but this seldom brings substantial relief in rheumatic fever, in which the bowels or kidneys appear to be the chosen critical emunctories. This was exemplified in the present instance; for on the ninth day of the disease, the bowels pouring out large quantities of almost pure bile, the limbs were released from pain, as if the pressure of a tight hand had been removed from them, and the stiffness and numbness consequent on such constriction only left. In the meanwhile the acid character of the sweat and urine, of the former especially, had considerably altered. The urine was more copious, but still high colored and turbid. Short sleeps had been procured, probably by the endermic use of laudanum. The pulse, as well as the animal power, was immensely reduced; for the whole nutriment during the time consisted in rice and barley-water. And, as the diarrhœa came on, the amount of perspiration diminished. I need not add, that on the appearance of diarrhœa all medicine was discontinued. Although the tongue had become much cleaner, no small degree of morbid redness pervaded it. When this is the case, craving for food often seizes the patient, and if it be gratified with strong aliment, relapse into pain is almost sure to follow. Mindful of this, I kept the patient an entire fortnight on liquid farinaceous diet. The limbs were rubbed with a flesh-brush twice a day, and still detained in flannel covers, until the use of them was fully recovered; and the temperature of the room was regulated night and day. More or less gastric irritation continued for three weeks after the cessation of the rheumatism, and required constant care in regard to diet. There was also extension of this action to the mucous surface of the air-tubes—a frequent occurrence in rheumatic fever—and a loose cough troubled the patient for ten days. But as the stomach was more able to take animal food, and the general strength increased, this diminished. The subject of this case has had no further attacks of the kind; but she has taken especial care of her digestive organs since the last time.—*From Dr. Gully's Simple Treatment of Disease.*

AN ACCIDENTAL DEATH.

On Saturday last an inquest was held at the Ship and Anchor Inn, before W. Codd, Esq., coroner, and a respectable jury, on the body of an infant, aged nine months, which had died in its mother's arms. The mother, a German, stated that her name was Metscar, and that the child had been ill several days; that she came to Maldon on Tuesday evening, and went to Cornel's lodging-house, where, the child being ill, she stayed within all Wednesday, and on Thursday she took it to Mr. Fearnley, chemist, who gave her a powder for it. On Friday morning she thought it appeared better, and she started off with it to go to Colchester to her husband; when she got as far as Heybridge she looked at the child, and found it was dead, on which she went back to the lodging-house. Mr. Fearnley stated that the woman appeared to be in great distress about the child when she brought it to him, and he believed the child died from natural causes. The jury returned a verdict to that effect, and said they did not consider that any blame attached to the mother.—*Chelmsford Chronicle.*

LONDON MEDICAL SOCIETY.

The ordinary weekly meetings of this society will be resumed on the 26th instant, when Mr. Pilcher will read a paper on the excito-motory functions.

OBITUARY.

On the 14th instant, Frederick Philpot, Esq., surgeon, late of Upper Southwick-street, Paddington.

APOTHECARIES' HALL.

Licentiates admitted Thursday, September 15, 1842.

C. Cooper, Rawcliffe, Yorkshire; H. Newman, Kersey, Suffolk; T. S. Rising, Martham, Norfolk; J. W. Webb, Pangbourne, Berks; W. Heygate, West Haddon.

Gentlemen desirous of having the "Provincial Medical Journal," forwarded to them by post, may send a post-office order to the Publisher, 356, Strand, London.

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Address (prepaid) to M. D., 14, Euston-place, Euston-square.

LONDON HOSPITAL MEDICAL and SURGICAL SCHOOL.—LECTURES will commence on Monday, October 3, 1842, at Half-past Two.

PRINCIPLES AND PRACTICE OF MEDICINE—Dr. Cobb and Dr. Little.
MATERIA MEDICA, &c.—Dr. Pereira, F.R.S.
MIDWIFERY, &c.—Dr. F. H. Ramsbotham.
CHEMISTRY—Dr. Pereira, F.R.S.
FORENSIC MEDICINE—Dr. F. H. Ramsbotham and Dr. A. Frampton.
ANATOMY AMD PHYSIOLOGY—Mr. Adams.
SURGERY—Mr. Luke and Mr. Curling.
PRACTICAL ANATOMY—Mr. Adams and Mr. Critchett.
BOTANY—Mr. Quekett, F.R.S.
ANATOMY OF THE TEETH AND DENTAL SURGERY—Mr. Craigie.
CLINICAL LECTURES—Dr. Gordon, F.R.S., Dr. A. Frampton, Mr. Scott, and Mr. Luke.

General Fee for the above Lectures, qualifying for the Hall and College, £50.

GUY'S HOSPITAL MEDICAL and SURGICAL SCHOOL.—The INTRODUCTORY ADDRESS will be given by Dr. BABINGTON, on Saturday, the 1st of October, at Two o'Clock, in the Anatomical Theatre.

MIDDLESEX HOSPITAL SCHOOL of MEDICINE.—The WINTER SESSION will commence on Monday, October 3, 1842.

ANATOMY, PHYSIOLOGY, DEMONSTRATIONS, AND DISSECTIONS, by E. W. Tuson, F.R.S., Mr. Erasmus Wilson, and Mr. H. M. Rowdon.
MEDICINE, by F. Hawkins, M.D.
SURGERY, by H. Mayo, F.R.S.
MIDWIFERY, by J. North, F.L.S.
MATERIA MEDICA, by Mervyn Crawford, M.D.
CHEMISTRY, by Mr. Everitt.
FORENSIC MEDICINE, by Mr. C. De Morgan.
BOTANY, by Mr. Rogers.
CLINICAL MEDICINE, by Dr. Hawkins, Dr. Wilson, and Dr. Watson.
CLINICAL SURGERY, by Mr. Mayo, Mr. Arnott, and Mr. Tuson.

Perpetual Fee to the whole of the Lectures, £45.

The INTRODUCTORY ADDRESS on the opening of the Session will be delivered by Erasmus Wilson, Esq., on Monday, October 3rd, at Two o'Clock.

A Public Distribution of Prizes will take place at the termination of the Winter Session.

In addition to the ordinary Prizes, an Annual Prize of the value of £20 will be awarded for general proficiency.

Clinical Prizes in Medicine and Surgery will be awarded by the Physicians and Surgeons of the Hospital.

A Theological Prize will be offered by the Chaplain of the Hospital to such Students as may be desirous of competing for it.

The Museum, Library, and Reading-room, are open for the use of the Pupils.

For further particulars, apply to the Secretary of the Hospital.

CHARLOTTE-STREET SCHOOL OF MEDICINE, No. 15, Charlotte-street Bloomsbury.—LECTURES will commence as usual on Saturday, October 1.

ANATOMY, PHYSIOLOGY, DEMONSTRATIONS, AND DISSECTIONS, daily, by Mr. Dermott.
THEORY AND PRACTICE OF MEDICINE—Dr. Aldis.
MIDWIFERY, AND DISEASES OF WOMEN AND CHILDREN—Dr. T. S. Harrison.
MATERIA MEDICA—Mr. W. R. Baxter and Mr. Cooper.
CHEMISTRY—Dr. J. Scoffern.
THEORY AND PRACTICE OF SURGERY—Mr. Dermott.
BOTANY—Dr. Brown.
MEDICAL JURISPRUDENCE—Dr. Scoffern.

For all the Lectures required by the Royal College of Surgeons, Apothecaries' Hall, Army and Navy Medical Boards, &c. &c., Thirty Guineas, whereby a saving of nearly one-half the usual expense is effected.

Perpetual to the Lectures on Anatomy, Surgery, the Demonstrations and Dissections, exclusive of the rest, Ten Guineas.

Courses of Private Instruction are also given by the Teachers to qualify for the College of Surgeons, London University, and Apothecaries' Hall.

House Pupils received by Mr. D., who have extra Private Instruction and the privilege of unlimited Dissection, whose education is conducted with most scrupulous care.

For further particulars, apply to Mr. Dermott, 15, Charlotte-street, Bloomsbury; to Dr. Harrison, 14, Gower-street, Bedford-square; or to Dr. Aldis, 13, Old Burlington-street.

CHARING-CROSS HOSPITAL MEDICAL SCHOOL.—Dr. CHOWNE will commence his COURSE of LECTURES on OBSTETRICS, &c., at the Charing-Cross Hospital Medical School, October 3, 1842.

Abundant opportunities are afforded to advanced Students at all times for attending Obstetric Cases.

THE MANCHESTER ROYAL SCHOOL of MEDICINE and SURGERY, Pine-street. Established in 1824.

WINTER SESSION.

The following is the Order of Study to be adopted during the ensuing Winter Session, which will commence on Saturday, the 1st of October, at Twelve o'Clock, when an INTRODUCTORY ADDRESS will be delivered by Mr. Ransome.

ANATOMY AND PHYSIOLOGY (HUMAN AND COMPARATIVE), AND PATHOLOGY, by Mr. Turner. Introductory Lecture on Monday, October 3, at Twelve o'Clock.

ANATOMICAL DEMONSTRATIONS, by Mr. W. Smith.

PRINCIPLES AND PRACTICE OF PHYSIC, by Dr. Chaytor. Introductory Lecture on Tuesday, October 4, at Twelve o'Clock.

MATERIA MEDICA, MEDICAL BOTANY, AND THERAPEUTICS, by Dr. R. F. Ainsworth. Introductory Lecture on Tuesday, October 4, at Seven o'Clock in the Evening.

PRINCIPLES, PRACTICE, AND OPERATIONS OF SURGERY, by Mr. Ransome. Introductory Lecture on Wednesday, October 5, at Twelve o'Clock.

PRINCIPLES AND PRACTICE OF MIDWIFERY TO THE DISEASES OF WOMEN AND CHILDREN, by Mr. Heath. Introductory Lecture on Thursday, October 6, at Twelve o'Clock.

CHEMISTRY, by Mr. Davies. Introductory Lecture on Friday, October 7, at Twelve o'Clock.

ANATOMY, PHYSIOLOGY, AND PATHOLOGY OF THE EYE, by Mr. Hunt. Introductory Lecture on Friday, October 7, at Seven o'Clock in the Evening.

GENERAL PATHOLOGY, by Mr. Stephens. Introductory Lecture on Saturday, October 8, at Twelve o'Clock.

SUMMER SESSION.

FORENSIC MEDICINE, by Dr. Black.

BOTANY, by Mr. Just and Dr. Robert Hardy.

ANATOMY, PHYSIOLOGY, AND PATHOLOGY OF THE EYE, by Mr. Hunt.

Connected with the School are Museums of Human and Comparative Anatomy (Healthy and Morbid), to which Students have free access, also a Chemical Laboratory, a Library, and Medical Society.

At the conclusion of the Session, Medals and Certificates of Honor will be awarded to the most distinguished Students.

Certificates of the above Lectures (which constitute a complete Course of Medical Education) qualify for examination at the Royal College of Physicians, London, at the Royal College of Surgeons, at Apothecaries' Hall, at the Army Medical Board, and at the London University. It will likewise be seen that the Royal College of Surgeons have passed a resolution, admitting an attendance on the Practice of the Manchester Royal Infirmary as equivalent to that on the London Hospitals; this School, therefore, now enjoys all the privileges of the Metropolitan Schools.

The hours of delivering the Lectures are so arranged as not to interfere with attendance and Clinical Instruction at the Royal Infirmary, &c.

For particulars as to terms, &c., application may be made at the School, or at the houses of the respective Lecturers.

Session 1842 and 1843.

WESTMINSTER HOSPITAL.

WINTER SESSION, 1842-3, commencing October 1.

General Anatomy and Physiology—Dr. Hunter, late Andersonian Professor of Anatomy, Glasgow, and Mr. Bennett Lucas.

Descriptive and Surgical Anatomy—Dr. Hunter and Mr. Bennett Lucas.

Chemistry—Harman Lewis, M.A., Trinity College, Cambridge.

Materia Medica and Therapeutics—Dr. Basham.

Principles and Practice of Medicine—Dr. Hamilton Roe and Dr. Burne.

Principles and Practice of Surgery—Benjamin Phillips, F.R.S.

Midwifery, and Diseases of Women and Children—Dr. Andrews.

Medical Physics—Charles Brooke, M.B., Cantab.

Clinical Lectures on Medicine—Dr. Hamilton Roe and Dr. Burne.

Clinical Lectures on Surgery — Mr. Anthony White and Mr. H. Thomson.

SUMMER SESSION, commencing May 1, 1843.

Forensic Medicine—Dr. Frederic Bird, and William Hodges, Esq., Barrister-at-Law.

Botany—Dr. G. A. F. Wilks.

HOSPITAL PRACTICE.

Physicians—Dr. Bright, Dr. Hamilton Roe, Dr. Burne.

Surgeons—Anthony White, Esq., G. J. Guthrie, Esq., W. B. Lynn, Esq.

Assistant-surgeon—F. Hale Thomson, Esq.

LYING-IN INSTITUTION.

Physicians—Dr. Andrews, Dr. Frederic Bird.

Prospectuses of the Lectures may be obtained by application to the Honorary Secretary, Dr. Basham, or at the Hospital School.

ST. BARTHOLOMEW'S HOSPITAL MEDICAL SCHOOL.

WINTER SESSION, 1842, to commence October 3.

Medicine, by G. Burrows, M.D.

Anatomy, Physiology, and Pathology, by E. Stanley, F.R.S.

Practical Anatomy, by Mr. Wormald.

Superintendence of Dissections, by Mr. Wormald and Mr. M'Whinnie.

Surgery, by William Lawrence, F.R.S.

Chemistry, by Mr. Griffiths.

Materia Medica and Therapeutics, by G. L. Roupell, M.D., F.R.S.

Midwifery, and the Diseases of Women and Children, by E. Rigby, M.D.

SUMMER SESSION, 1843, to commence May 1.

Forensic Medicine, by W. Baly, M.D.

Midwifery, and the Diseases of Women and Children, by E. Rigby, M.D.

Botany, by F. J. Farre, M.D., F.L.S.

Comparative Anatomy, by Mr. M'Whinnie.

Practical Chemistry and Natural Philosophy, by Mr. Griffiths.

Clinical Lectures on Medicine, by Dr. Roupell and Dr. Burrows;

And on Surgery, by Mr. Lawrence and Mr. Stanley.

Demonstrations of Morbid Anatomy, by Mr. Paget.

Prospectuses of the Lectures, and a statement of the arrangements of the School, may be obtained by application to Mr. Hurlock, Resident Medical Officer, at the Hospital, or at the Anatomical Museum.

Residence of Students.—Some of the Lecturers and other Gentlemen connected with the Hospital receive Students into their houses. Applications to be directed to Mr. Paget, at the Anatomical Museum.

SCHOOL of ANATOMY and MEDICINE, adjoining St. George's Hospital, Established 1830.—LECTURES will be given during the ensuing Session, commencing October 1st, 1842.

Anatomy, Physiology, and Surgical Anatomy, by Mr. Lane and Dr. W. V. Pettigrew.

Practical Anatomy, with Demonstrations, by Dr. Pettigrew, assisted in the Dissecting-room by Mr. Cane.

Chemistry, by Mr. Rodgers.

Materia Medica and Therapeutics, by Dr. Lankester.

Midwifery, and the Diseases of Women and Children, by Mr. Bloxam.

The Principles and Practice of Medicine, by Dr. Goolden.

The Principles and Practice of Surgery, by Mr. Lane and Mr. Chapman.

Medical Jurisprudence, by Mr. Hutchings and Mr. Ancell.

Botany, by Dr. Sigmond.

Prizes and Honorary Certificates will be given at the end of the Session.

The Introductory Address on the opening of the School for the Session 1842-43, will be delivered by Dr. Goolden, on Saturday, October 1, at Twelve o'Clock.

ST. THOMAS'S HOSPITAL.

THE AUTUMNAL COURSES of MEDICINE will commence on Monday, the 3rd of October, 1842.

Introductory Lecture—Mr. Green, at Two o'Clock.

Medicine—Dr. Hodgkin and Dr. Barker.

——— on the Nervous System—Dr. Marshall Hall.

——— Small-pox and other Exanthemata—Dr. George Gregory.

Clinical Medicine—Dr. Williams, Dr. Burton, and Dr. Barker.

——— Dr. Leeson, Dr. Hodgkin, and Dr. Cape.

Surgery—Mr. Green and Mr. B. Travers.

Clinical Surgery—Mr. Green, Mr. Tyrrell, and Mr. South.

——— Mr. Mackmurdo, Mr. Solly, and Mr. B. Travers.

Anatomy, General, and Physiology—Mr. R. D. Grainger.

——— Researches in Embryology—Dr. Martin Barry.

——— Descriptive and Surgical—Mr. F. Le Gros Clark.

——— Pathological — Dr. Hodgkin and Dr. Barker.

——— Comparative—E. Meryon, M.B.

Anatomical Demonstrations—Mr. Dixon and Mr. Trew.

Chemistry—Dr. Leeson and Mr. Parnell.

Materia Medica—Dr. Barker and Dr. Wilks.

Midwifery and the Diseases of Women and Children—Dr. Cape.

Forensic Medicine—Dr. Leeson.

Botany—R. D. Hoblyn, A.M., Oxon.

Diseases and Operations of the Teeth.—Mr. E. Saunders.

Prospectuses for further particulars of the Lectures and Hospital Practice may be had by applying to Mr. Whitfield, resident Medical Secretary.

The following Prizes will be awarded in the Spring:—Two Medals, two Six Months' Dresserships, two Clinical Medical Clerkships. Value of each, 15 Guineas.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—WINTER SESSION commencing October 31.

ANATOMY AND PHYSIOLOGY—Dr. Jacob.
DESCRIPTIVE ANATOMY—Dr. Hargrave, Dr. Hart.
SURGERY—Dr. Wilmot, Dr. Porter.
PRACTICE OF MEDICINE—Dr. Benson, Dr. Evanson.
CHEMISTRY—Dr. Apjohn.
MATERIA MEDICA—Mr. Williams.
MIDWIFERY, AND DISEASES OF WOMEN AND CHILDREN—Dr. Beatty.
MEDICAL JURISPRUDENCE—Dr. Geoghegan.
HYGEINE—Dr. Maunsell.
BOTANY—Dr. Bellingham.
NATURAL PHILOSOPHY—Dr. Apjohn.
COMPARATIVE ANATOMY—Dr. Jacob.

Dissections under the superintendence of the Professors of Descriptive Anatomy, and the Demonstrators, Mr. Dillon, Mr. Leeson, and Mr. Labatt.

C. O'KEEFE, Registrar.

KING'S COLLEGE, LONDON.—MEDICAL DEPARTMENT, 1842-43.

THE WINTER SESSION will commence on Saturday, the 1st of October next, at Two o'Clock, p.m., with an INTRODUCTORY LECTURE, by Professor Guy.

There will be no Evening Lectures.

DESCRIPTIVE AND SURGICAL ANATOMY—Richard Partridge, F.R.S. Nine, a.m.
PHYSIOLOGY, GENERAL AND MORBID ANATOMY—R. B. Todd, M.D., F.R.S. Three-quarters past Eleven, a.m.
PRACTICAL ANATOMY is Taught in the Dissecting-rooms, by Mr. J. Simon and Mr. W. Bowman, F.R.S.
CHEMISTRY—J. F. Daniell, F.R.S., and W. A. Miller, M.B. Three, p.m.
MATERIA MEDICA AND THERAPEUTICS—J. F. Royle, M.D., F.R.S. Quarter-past Ten, a.m.
MEDICINE—George Budd, M.D., F.R.S. Half-past Twelve, p.m.
SURGERY—William Fergusson, F.R.S. Four, p.m., Tuesday, Thursday, and Saturday.
MIDWIFERY, AND DISEASES OF WOMEN AND CHILDREN—Robert Ferguson, M.D., and Arthur Farre, M.D., F.R.S. Four, p.m., Monday, Wednesday, and Friday.
COMPARATIVE ANATOMY—T. Rymer Jones, F.Z.S. Half-past Eleven, a.m., Tuesday and Saturday.

SUMMER COURSES.

BOTANY—E. Forbes, F.L.S.
FORENSIC MEDICINE—W. A. Guy, M.B.
CHEMICAL MANIPULATION is Taught in the Laboratory, by W. A. Miller, M.B.

KING'S COLLEGE HOSPITAL.

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Clinical Lectures are given every week by the Physicians, Dr. Budd and Dr. Todd; and by the Surgeons, Mr. Fergusson and Mr. Partridge. The Physicians' Assistant and Clinical Clerks, the House Surgeon, and Dressers, are selected by examination from the Students of the Hospital.

RESIDENCE OF STUDENTS.—A limited number of Students may be accommodated with rooms in the College, and some of the Professors receive students into their houses.

SCHOLARSHIPS.—Three Scholarships for Matriculated Medical Students have been founded in the College. Each Scholarship is of the yearly value of £40, and may be held for three years.

Any further information may be obtained upon application to the Dean of the Medical Department, or to the Secretary, at the College.

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THEORY AND PRACTICE OF PHYSIC—Dr. Macleod.
THEORY AND PRACTICE OF SURGERY—Mr. Cæsar Hawkins and Mr. G. Babington.
CLINICAL MEDICINE—Dr. Seymour.
CLINICAL SURGERY—Sir B. C. Brodie, Bart., Mr. Hawkins, Mr. Babington, and Mr. Walker.
ANATOMY AND PHYSIOLOGY—Mr. Tatum and Mr. Henry James Johnson.
DESCRIPTIVE ANATOMY, WITH DISSECTIONS—Mr. H. J. Johnson and Mr. H. C. Johnson.
MATERIA MEDICA—Dr. Nairne.
MIDWIFERY—Dr. Lee.
MEDICAL JURISPRUDENCE—Dr. Page.
BOTANY—Dr. Dickson.
CHEMISTRY, at the Royal Institution—Mr. Brande and Mr. Solly.

The Introductory Address on the opening of the Hospital School for the Session 1842-43 will be delivered by Mr. Tatum, in the Theatre of the Hospital, on Saturday, October 1, at One o'Clock.

The Anatomical Lectures are delivered in the Anatomical Theatre, Kinnerton-street, Wilton-place.

A Public Distribution of Prizes in the several classes will take place at the termination of the Session.

Further particulars and Prospectuses may be obtained by applying to the Porter of the Hospital, to the Porter of the Hospital Museum, or at the Anatomical Theatre, in Kinnerton-street, Wilton-place.

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